MANAGING CUSTOMER RELATIONSHIP IN THE CORPORATE HEALTHCARE SECTOR

Thesis

Submitted for the award of

PhD in Business Administration

By

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ABSTRACT

The whole conceptualization of this research topic was a bye product of personal experiences at some of the Government and the so called Charitable Hospitals. Having taken the gauntlet there was no option of going back in spite of the warnings by friends, specialists like Mr. Barnes of CRMGuru fame and the lack of research in this area.

Healthcare marketing primarily being a service marketing concept, Relationships are very important. Relationship Marketing is a marketing method in which businesses consistently maintain two-way communication with their prospective, current and inactive customers in order to gain a deeper understanding of their needs while delivering personal and compelling marketing throughout their lifecycle.

Managing Profitable Customer Relationships will be a key success factor for most Indian Companies as we move into the 21st century. However, many Companies are taking pre-mature decisions of starting 'loyalty or frequency' programs for their customers. Since Relationship Marketing requires a considerable investment of time, talent and rupees, it's vital that we take care to avoid some of the pitfalls we may encounter on the road to a successful Relationship Marketing Program (Sethi 2002).

Research in relationship behavior and relationship marketing has presented a lot of strong evidence that supports the hypothesis that the relationship aspect plays a central role in the understanding of markets and company behavior in real life. This research not only draws such conclusions from empirical evidence, but also from theoretical models of behavior and marketing systems that can actually describe and explain relationship patterns and market structures (Hougaard and Bjerre 2004 14).

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Given the dramatic effect that improved customer retention can have on business profitability, the hospitals need an approach that leads to greater loyalty, enhanced relation and profitability. This in turn requires them to better understand how to measure customer retention; identification of root causes of defection and related key service issues; and the development of corrective action to improve retention. The Healthcare Sector broadly comprises of: Hospitals, Medical Tourism, Health and Health Management Education, Health insurance, Laboratory and Diagnostic Services, Pharmaceuticals & Drugs Segment, Medical Devices and Equipment, Registries, Healthcare BPO, Telemedicine, Immunology, and Managed Care. We are restricting this study to Hospitals only.

The setting up of the Corporate Hospitals, although still at the nascent stage in India, was preceded by the Charitable Hospitals phase. The healthcare scenario had otherwise been occupied wholly by the Government Sector except for the private clinics. Now, the situation has reversed wherein the Government investments in the Hospitals is very less, barely to the extent of 20% of the total expenditure on health in India. Although, on the whole for an Asian comparison the Health expenditure as % of GDP for India is a healthy 5% + and is only second to China.

In India healthcare is about to explode: the sector, comprising sectors like hospitals, health insurance, and managed care is worth $15 billion translating to Rs. 670 billion currently (that's almost equal to the turnover of the country's 12 largest private sector companies including Reliance Industries, Hindustan Lever and ITC). But that's just the tease. "The real McCoy, lies in the fact that India's healthcare sector is expected to grow by around 13 percent a year for the next five years", said Amit Bagaria of Asian Health Services (Medserv website article). India with its inherent qualities can become the global hub for healthcare services. It is being touted as the next 'big boom' and the sector is expected to grow rapidly over the next decade, to reach a level of Rs. 3200 billion by 2012,

largely spurred by an increased corporate presence in the sector. The need of the hour is to understand this market and plan future strategies to harness the lying opportunity (Industry Insight 2006). The windfall began ever since the developed world discovered that it could get quality service for less than half the price.

- In the last five years, the number of patients visiting India for medical treatment has risen from 10,000 to about 100,000. According to Apollo group chairman Prathap Reddy, one out of every ten patients treated at his hospitals is from abroad.
- With an annual growth rate of 30 percent, India is already inching closer to Singapore, an established medicare hub that attracts 150,000 medical tourists a year.
- Hospitals in India boast of conducting the latest surgeries at a very low cost.
- India's independent credit rating agency CRISIL has assigned a grade A rating to super specialty hospitals like Escorts and multi specialty hospitals like Apollo.
- NHS of the UK has indicated that India is a favored destination for surgeries.

The Indian healthcare industry seems to have come a full circle — moving from rural to urban areas and now back to small places, offering an unprecedented pace, scale and spectrum of services. The development, of course, was inevitable, given the geographical advantage, talent pool, enterprise level and growth potential in the country. Arguably, the decade gone by was a crucial differentiator in the healthcare scenario.

The private Indian healthcare sector has the following major corporate players:

- Apollo Group of Hospitals
- Fortis Healthcare includes Escorts
- Max Healthcare
- Wockhardt Hospitals Ltd.
- Birla Heart & Research Centre

In spite of the reforms sweeping the healthcare sector in general, the Indian hospitals are constrained by several government regulations. To begin with, Indian hospitals are not allowed to advertise the way a telecom service marketer or a consumer goods marketer would. When millions of rupees in technology and infrastructure are invested in a hospital, it makes it less than fair. It impacts their efforts to survive, attract patients and to generate funds though deregulated marketing, they contend. Still, each corporate hospital has formulated its differentiated marketing strategy and business development plans to benefit from the opportunities and to relate better with their customers.

The relevance of the research is both from industry and academic viewpoints. The objectives of this research are:

- To ascertain the Customer Service Quality perceptions vis-à-vis the expectations.

The research sub objectives to attain the main objective are:

- To understand the service standards maintenance thru responsiveness, reliability and assurance.
- To understand the convenience, empathy and tangibles delivery against the expectations.

This study is descriptive in nature and IS conducted in phases. The first phase deals with developing an appropriate research framework with facts and theories accessed from literature survey on Healthcare sector, Healthcare sector Analysis, and the current pattern of Customer Relation practices in the Healthcare sector. The aim is to develop the framework, which will then be used to serve meeting the research objective and sub objectives.

The second phase of the study is an empirical study of Hospitals through the beneficiaries. The research approach would be Survey Research, through

structured questionnaire and Interviews. The standardized and validated questionnaire after due pilot testing and suitable changes, if any, will be used for this.

This study is limited in its approach. The retention strategies are being examined only in the context of Healthcare Sector with specific focus on corporate hospitals and their customers out of a total of numerous Hospitals in India spread across different geographical locations. While all the corporate hospitals in Delhi have been attended to personally for the questionnaire administration, some randomly chosen hospitals were sent the questionnaires by mail to seek the responses.

Yet the study is likely to contribute to the newly developing field of research on managing customer relationships, as issues are examined critically in the context of emerging Healthcare scenario. This will immensely help the Healthcare sector in integration of right attitudes with service delivery and customer relationships endeavors so as to take more and more market shares and hence profits. The Study will evoke scope for further research in this emerging field for ultimate benefit of society at large.

The research also discusses the theoretical aspects of CRM in its various forms, namely:

- Caring Relations Management (CRM)
- Continuous Relations Management (CRM)
- Creative Relations Management (CRM)
- Customer Retention Management (CRM)
- Customer Return Management (CRM)
- Cost Reduction Management (CRM)
- Cost and Return Management (CRM)

Customer lifetime value has intuitive appeal as a marketing metric, because in theory it allows companies to know exactly how much each customer is worth in

dollar terms, and therefore exactly how much a marketing department should be willing to spend to acquire each customer. In reality, it is often difficult to make such calculations, either due to the complexity of the calculations, or to the lack of reliable input data, or both.

In more ways than one, CRM represents a logical end of the philosophy that the business should be customer oriented (Gamble, Stone and Woodcock 2000; Payne 1997). It traversed the successive strains of thoughts to reach what is now viewed as a new business paradigm. For instance, the early marketing paradigms prevalent until the sixties, ordained marketers to satisfy customer needs that were essentially nature created. Later in the seventies, the marketing functions served the customer wants that were nothing but 'specific solutions' to the needs and were the outcome of the marketing initiatives. Marketing thoughts of the eighties devoted themselves to meet the higher, more lifestyle oriented demands and expectations of customers. These were the result of the then social and economic environment. The nineties witnessed the most potent force of our times, information technology. Naturally marketing thoughts focused on how to leverage on the same and serve the customers (Kotler, 2000). One of the fall out of the era is Customer relationship management. CRM, thus, represents 'the marriage between the customer orientation and the emerging information technology to produce a memorable relationship experience to the marketers as well as to the customers (Agrawal 2002).

- The Indian CRM market can be sized at Rs. 50 -100 Crores (1Crore=10 million)
- The CRM market can be segmented into the market for software and services
- The services segment includes outsourced CRM services, integration, training, and consultancy.
- The market for CRM services is considerably larger than the market for CRM software.

The literature review and the theoretical aspects in the discussion also include details about the

- Indian Healthcare Sector.
- The existing Major Indian Corporate Hospitals.
- International Hospitals entering or planning to enter the Indian market.
- Soft nuances of the healthcare sector e.g. Marketing, Hospital Architecture, Hospital Consultancy Services, Accreditation, Mergers and Acquisitions, Patient Grievance cell, and Medical Tourism.

The core of the study is formed by the Research Methodology and the Analysis parts. The problem here is identified in terms of the customer satisfaction.

Are the hospitals doing enough to keep the patients/customers happy and satisfied? Is it important?

Our basic research design process is Descriptive. Further the study is cross sectional in nature employing a correlation/paired comparison research design to describe the statistical association between two or more variables.

The most major type of information utilized by us is primary data. This is done thru one on one interview at the place of discussion i.e., the hospital itself, both inpatients as also the outpatients.

The literature review is a secondary data type. The sources have been books, periodicals, websites, printed literature from the hospitals etc.

The survey research methods have been employed for accessing the primary data. This has been taken care of thru designing of the Questionnaire and self-administered: face to face interviews. Questionnaires were also sent to outstations for responses from all over India.

The secondary data is taken from newspapers, books, periodicals, internet search, printed literature from the hospitals, and stock exchange reports etc.

A structured questionnaire was developed to collect data on the variables in this study. The questionnaire was adapted from the famed Service Quality: SERVQUAL (Parasuraman, Zeithaml, and Berry 1986, 1988); Ethics: Corporate Ethics Scale: CEP (Hunt, Wood, and Chonko 1989); Ethics: Marketing Norms Ethics Scale (Vitell, Rallapalli and Singhapakdi 1993) and Customer Orientation (Deshpande, Farley, and Webster 1993). A modified SERVQUAL questionnaire relevant to the healthcare industry was constructed by including items from the original five dimensions (Tangibles, Reliability, Responsiveness, Empathy and Assurance) of the SERVQUAL instrument developed and updated by (Parasuraman, Zeithaml, and Berry 1986, 1988). Cronin and Taylor (1992) test several service quality models, as well as the relationships among service quality, satisfaction, attitude, and purchase intentions. Their research supports measuring service quality as a unidimensional, performance-based construct called SERVPERF, which is equivalent to the 22 PERCEPTION items of the original SERVQUAL measure.

The items were refined and paraphrased in both wording and contextual application as appropriate to suit research purposes. Next, in order to obtain an even more comprehensive and industry-specific measure of the service quality construct, the research based upon the healthcare sector was undertaken. The instrument used for the Pilot study is attached in Appendix A.

The respective scales were used for the pilot so as to get the feedback on all the parameters i.e., Expectations and Perceptions, Ethics, and Customer Orientation. The pilot was administered to 50 respondents in total. The one on one interviews brought out some of the shortcomings clearly. The same are listed below:

- The questions were more Americanized and less pertinent in the Indian markets.

- Some Indian features in terms of what Indian patients look forward to, were altogether missing.
- Customer orientation, ethics scale and CEP questions were very direct while the questions from SERVQUAL were subtle and gentle and could get the desired inputs.
- It was very difficult to cater to so many cross sections.
- The feedbacks from Hospital staff were either strictly toeing the hospital line or were vitriolic against the Hospital Management. While the Doctors were 100% positive about the hospital the support staff was not.
- The respondents' suggestions were better tuned to a single questionnaire.

The comments and the observations from the pilot led to:

- A single common questionnaire with questions from the different questionnaires merged for the patients.
- Addition of many questions about access, water, telephone services, pricing, ethics etc.
- Deletion of some questions which were either not very pertinent to Indian public or they were not aware of.
- The Likert scale with the legend was placed at a conspicuous place to aid the respondents.
- The questionnaire was administered to same person for getting coherent responses against perceptions vis-à-vis the expectations hence, catering to a before after kind of a dichotomous relationship.

The duly tested and finalized Questionnaire is displayed as Appendix B. All the Questionnaire questions were close ended except for the demographic profiling questions.

The first section of the instrument consisted of forced-choice questions about demographic characteristics: age, gender, inpatient/outpatient, and urban/rural status while the questions on Income, ailment, education, age and the hospital name were open-ended.

All the patients visiting Corporate Hospitals as inpatients or outpatients in India form the population of this study. The charitable hospitals have been kept out of the scope of this study. The Universe or the population is thus the names of the patients registered with the respective corporate hospitals.

The population for this study as stated above is scattered all around India registered with one or the other corporate hospital. An all India study was, therefore, not feasible. The industry leaders and academicians were consulted so as to get a truly representative sample so as to avoid the biases. The number of corporate hospitals in India is not huge but the branches of different groups are many. In order to make it a representative sample the following hospitals were considered for narrowing down.

- Apollo Hospitals
- Escorts Hospitals
- Fortis Hospitals
- Max Hospitals
- Tata Hospitals
- Wockhardt Hospital

Although, subsequent upon the merger of Escorts Hospitals with Fortis Hospitals the two units are from the same group, yet they retain super specialized character in that the Escorts Heart Hospital caters only to Cardiac care. Tata has no presence in North India. Questionnaires were sent to Tata, Mumbai and Wockhardt, Mumbai by courier. The following was thus the sampling frame for our study – including all the Inpatient as also the out patients:

- Escorts Heart Institute and Research Centre, Delhi
- Fortis Jessa Ram Hospital, Delhi

- Gujarmal Modi Hospital & Research Centre for Medical Sciences, Delhi
- Indraprastha Apollo Hospital, Delhi
- Max Devki Devi Heart & Vascular Institute, Delhi
- Pushpawati Singhania Research Institute for Liver, Renal and Digestive Diseases, Delhi
- Tata Hospital, Mumbai
- Wockhardt Hospital, Mumbai

Sampling unit for this study is the Corporate Hospital patient of the abovementioned Hospitals be it inpatient or outpatient.

Assuming the highest variability of 50% and designing for a ± 5% Sample error at 95 percent level of confidence the number of respondents required is 384 (Burns and Bush 2003 392). We have taken a sample size of 500 out of which 404 questionnaires were administered personally while 100 were sent by courier to Tata Memorial Hospital and Wockhardt Hospital, Mumbai. The questionnaires were to be got filled by the hospital from their patients. The response rate against the direct mail respondents was a poor 2% and therefore the total sample size came to 406. Hence the number of the samples is sufficient to cater even the worst case scenario of 50% variability (in terms of the largest sample size).

The target population for the patients' study consisted of healthcare service users at the six listed hospitals in Delhi and NCR and two at Mumbai. There being no published list or public domain or directory of corporate healthcare patients the survey was based on the random visit at random times to the Delhi Hospitals for interaction with randomly chosen patients without any bias or judgment. The study was also undertaken at the respective hospitals at different times to further minimize the bias. The Mumbai segment was covered through mailed questionnaires.

At the pilot stage as also during the actual survey stage, the questionnaires were filled by interviewing them personally. However, some questionnaires were sent by mail. The final realized sample included a total of 406 usable questionnaires, representing 79.60 % success rate primarily due to near 100% success rate with the personal interviews.

The questionnaire was pre-tested using a convenience sample of approximately 50 respondents. Final data was collected over a period of three months. The study included a variety of respondents, like both genders, rural/urban, inpatients/outpatients to minimize any bias.

We have used Stratified Random Sampling in the said hospitals by taking randomly equal (nearly) number of respondents so as to study any relationships between the two. 216 outpatients were interviewed while 190 inpatients were the random respondents cutting across various illnesses, genders and other demographic details. The data was collected on the Questionnaires personally to minimize the nonsampling errors. The questionnaires were not got filled up from the non interested or "much in a hurry" respondents.

The reliability of the data was ascertained before any analysis was taken up so as to make sure about its utility for analysis. In this research, the multi-item scales measuring expectations and perceptions of the patients were checked for reliability by determining Cronbach's alpha and an alpha value of 0.60 or greater was considered acceptable. The validity of a measurement instrument refers to how well it captures what it is designed to measure (Rosenthal & Rosnow, 1984).

In the case of the Expectations instrument the alpha value is in excess of 0.90 without an exception. Similarly the alpha value for each of the 32 variables in the Perceptions instrument is above 0.90. The Standardized item alpha = 0.9101 for the Expectations questionnaire and the value of Standardized item alpha = 0.9254 for the Perceptions questionnaire. This establishes the reliability and

validity of the instrument without any doubt and hence no fine tuning or changes in the Instruments are required.

This was followed by a demographic analysis of the sample. The sample is almost perfectly balanced in terms of Gender and inpatients/outpatients although there is a minor skew of 3% towards outpatients. The gender representation from urban populace is equally divided while females form less than 34 percent of the rural sample. Likewise less than 34 percent of rural sample were inpatients.

The sample is predominantly Urban (87.4 percent). Illiterates form the smallest mass and surprisingly the data is not too much skewed against the rural areas. The rural representation being miniscule not much meaning can be drawn from the sample, although the rural representation in the corporate hospitals may itself be very small indeed. Almost 30 percent patients from the rural areas were undergraduates while other 40 percent were Secondary school qualified. In case of the urban respondents more than 40 percent were undergraduates, 23 percent were with secondary education, and more than 20 percent were Postgraduates. .

More than 72 percent Fortis Jessa Ram Hospital sample patients were females and hence homemakers formed the largest mass. In the other hospitals the proportion was rather even. The attendance of Service class people was rather even across the hospitals. 67 percent of females were homemakers while 50 percent of males were in service. 25 percent of the males were in business. Higher percentage of females was suffering from general, other, neurological and ENT ailments. The males were suffering more frequently with Cardiological, liver and orthopedic ailments.

While Escorts Hospital, Indraprastha Apollo Hospital and Max Devki Devi Hospital had majority of Inpatients in case of Modi Hospital, Fortis Jessa Ram Hospital and Pushpawati Singhania Hospital the converse has been true. The

rural attendance was the highest at Indraprastha Apollo Hospital. On the contrary the urban representation was the highest at Max Devki Devi Hospital.

The Hospitals attracted most patients from their respective super specializations, e.g., Escorts, Max and Apollo for Cardiology; Pushpawati for Renal, hepatic and Stomach; and Fortis, Modi for General patients (mostly outpatients). More than 60 percent inpatients were cardiology cases while majority of outpatients were from general or other ailments.

There is a KMO statistic for each individual variable, and their sum is the KMO overall statistic. KMO varies from 0 to 1.0 and KMO overall should be .60 or higher to proceed with factor analysis. If it is not, drop the indicator variables with the lowest individual KMO statistic values, until KMO overall rises above .60. http://www2.chass.ncsu.edu/garson/pa765/factor.htm#kmo

If visual inspection of correlation matrix reveals substantial number of correlations greater than .30, then factor analysis is appropriate (Hair, Anderson, Tatham, and Black, 1998).

The correlation coefficients are all in the significant zone at 99% confidence level and hence ready for Factor analysis and such further studies. We also observe here that most of the correlations are above 0.300, the Factor Analysis is in order.

The t-tests, ANOVA, factor analysis, reliability analysis and reliability analysis helped the data analysis and the results are generalized as follows:

The corporate hospitals are not meeting the standards as expected by the patients on all the Factors although, by varying degree.

The Service Performance being not upto the Service Quality levels desired by the patients, the hospitals have got to get their act together. The Corporate Hospitals

must act in all the seriousness to plug the gaps and excel on the respective parameters.

The following is the hospital comparison in terms of the analysis of the collected information:

BEST

- Escorts Heart Institute and Research Centre is the best in terms of Tangibility, Convenience and Responsiveness implying that it has the least of difference between the expectations and perceptions.
- Indraprastha Apollo Hospital is the best in Assurance, Empathy and Reliability attributes.
- The Highest of the values all across the perception and expectation values across the factors is for Tangibility at Escorts.
- The Second Highest value all across the perception and expectation values across the factors is for Convenience at Escorts.
- The best performance is exhibited for Convenience and Tangibility.

WORST

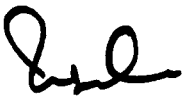
- Fortis Jessa Ram Hospital is the worst in Responsiveness and Empathy.
- Pushpawati Singhania Hospital is the worst in Assurance.
- Max Devki Devi Hospital is the worst in Tangibility.
- Modi Hospital is the worst in Reliability and Convenience.
- The poorest performance is exhibited in Responsiveness and Reliability.

- The Lowest value across the factors is for Reliability at Modi Hospital.
- Second Lowest value across the factors is for Responsiveness at Fortis Jessa Ram Hospital.

Hence the Competitive advantage can be gained and further improved upon by Escorts Heart Institute and Research Centre and Indraprastha Apollo Hospital while furthering their performance for the other factors. Fortis Jessa Ram Hospital and Modi Hospital have considerable efforts to put in even to close their gap with Escorts and Apollo. Singhania Hospital and Max Hospital are more middle of the road hospitals and require lesser strategy and plans to catch up with the top hospitals.

India's corporate hospitals need to be fully equipped, up market and efficient. With their toll-free helplines, interactive websites, online quotes and time-bound treatment access, they can appear to be a world apart from the overburdened, often badly managed and poorly funded public health system. Although, it is a big question if all this will make the facilities unaffordable and out of bounds, in terms of waiting time, for the domestic population. Yet, one thing is for sure that the positive rub-offs will exceed the limitations and healthcare will become an effective and steadily growing sector with attraction of market entry for other players or for expansion of the network.

V.V. Bashi of MIOT Hospital, Chennai says: "Our medical standards are world class, but if we have to get more patients from the U.S. and other developed countries, we must match their hospital documentation standards for insurance companies to cover all the risks in the event of an adverse treatment outcome."



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AMU Ph.D. REGISTRATION NUMBER EE5076

DECLARATION

I do hereby certify that the thesis entitled "MANAGING CUSTOMER RELATIONSHIP IN THE CORPORATE HEALTHCARE SECTOR" submitted to the Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh for the award of the degree of PhD IN BUSINESS ADMINISTRATION is a record of original work done by me during June 2002 to May 2006 under the supervision and guidance of Prof. Kaleem Mohamed Khan, Chairman, Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University (Internal Adviser) and Dr. D K Bhattacharyya, Professor and Chairman Management Development , IISWBM, Kolkata (External Adviser) and it has not previously formed the basis for the award of any Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.

Rupesh Goel

Place: Delhi

Date: 20th May 2006

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Prof. Kaleem Mohd. Khan
Chairman

June 20, 2006

CERTIFICATE

This is to certify that the thesis entitled "MANAGING CUSTOMER RELATIONSHIP IN THE CORPORATE HEALTHCARE SECTOR" submitted to the Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh in partial fulfillment of the requirements for the award of the degree of Ph D IN BUSINESS ADMINISTRATION is a record of original work done by Mr. Rupesh Goel during the period of his study in the Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University under my supervision and guidance and the thesis has not formed the basis for the award of any Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.

Place: Aligarh

Prof. Kaleem Mohammad. Khan

(Internal Adviser)

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CERTIFICATE

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Place: Kolkata

Date: 20th May 2006

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I thank the ALMIGHTY GOD for giving me the courage and perseverance to pursue this study and bring it to its logical conclusion.

I acknowledge with immense gratitude the assistance I received from all in the process of my research work. I convey my profound gratefulness to my Internal Adviser Prof. Kaleem Mohammad Khan, Chairman, Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh, for his expert professional guidance at all the times all through this Research Study. I am indeed indebted to him for the valuable time spared by him.

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I also express my sincere thanks to all the patients/attendants at the hospitals covered in the study for the necessary data inputs to the best of their capacities in spite of their personal distressing moments.

I also acknowledge with thanks the support from my friends, well wishers, library managers and support staff for the assistance and information provided by them.

Lastly and most importantly, I would like to express my gratefulness to my parents and my wife who continued to pep me up at my difficult moments and encouraged me at all the times to complete the study. They have been the prime movers of this effort. My children's keenness in seeing me finish this job played a very important role in the successful completion of the study.

Rupesh Goel

Delhi

20th May 2006

List of Figures and Tables

CHAPTER I

INTRODUCTION

1.1 Introduction

This chapter introduces the study and discusses various concepts relevant to the study. The chapter is divided into seven sections. Section 1.2 details the concept of Relationship Marketing, Section 1.3 throws light on Healthcare sector, Section 1.4 deals with Research Objectives, Section 1.5 details the Scope of Study, Section 1.6 discusses about the Rationale of the study, Section 1.7 highlights the Chapter Scheme, and the last part furnishes the References.

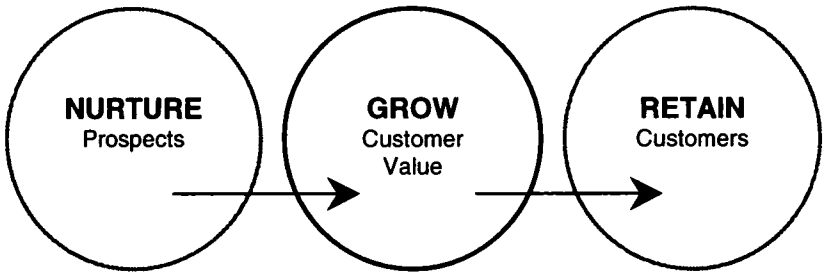
1.2 Relationship Marketing

Relationship Marketing - a marketing method in which businesses consistently maintain two-way communication with their prospective, current and inactive customers in order to gain a deeper understanding of their needs while delivering personal and compelling marketing throughout their lifecycle.

1.2.1 Relationship Marketing Process

The Relationship Marketing Methodology, developed by Vtrenz, divides the entire Marketing process into three critical lifecycle stages: Nurture, Grow and Retain. Each of the three stages is defined by its current relationship with the company and encompasses its own set of strategic goals, marketing tactics and metrics for benchmarking.

Fig 1.1: Relationship Marketing Process



Source: Vtrenz 2004

Relationship Marketing Methodology - Marketing as a Process:

Nurture - the process of identifying potential customers, initiating the exchange of information and moving consumers or businesses through the buying cycle toward a purchase.

Grow - the process of building more profitable, long-term relationships by encouraging repeat purchases of active customers.

Retain - the process of identifying and winning-back inactive and quit customers by reengaging them with your company, products and services (Vtrenz 2004).

Today, marketing heads and brand managers want to harness the power of relationship marketing to get their brands closer to their consumers. In an era of abundant choice, they believe this will be the only differentiator. The need to own customers across a lifetime is the primary reason for them to look at relationship marketing seriously. In fact, many One-on-one marketing gurus like Don Peppers and Martha Rogers of One-to-One marketing have stressed the importance of 'Customer Share rather than Market Share' in the emerging era of digital marketing (Swaminathan 2001).

Managing Profitable Customer Relationships will be a key success factor for most Indian Companies as we move into the 21st century. However, many Companies are taking pre-mature decisions of starting 'loyalty or frequency' programs for their customers. Since Relationship Marketing requires a considerable investment of time, talent and rupees, it's vital that we take care to avoid some of the pitfalls we may encounter on the road to a successful Relationship Marketing Program (Sethi 2002).

The market for Customer Relationship Management (CRM) systems and concepts is among the fastest growing industries. This growth reflects the need for companies to strengthen their relationship marketing competencies.

Traditional strategy and marketing textbooks treat customer-supplier relationships as an adjunct, extra dimension within the existing theoretical frames of reference. The relationship perspective has been viewed as a modification of accepted marketing theories, a new parameter among others to consider.

What we need, however, is a new marketing paradigm founded on relationships. Why? Since relationships are becoming the backbone to any competitive business and are the key to market success. Customers now pool their bargaining power in virtual associations and value chains that require a holistic perspective where competitors can also be partners (Hougaard and Bjerre 2004 13)!

Research in relationship behavior and relationship marketing has presented a lot of strong evidence that supports the hypothesis that the relationship aspect plays a central role in the understanding of markets and company behavior in real life. This research not only draws such conclusions from empirical evidence, but also from theoretical models of behavior and marketing systems that can actually describe and explain relationship patterns and market structures (Hougaard and Bjerre 2004 14).

It has been suggested that relationship marketing is taking marketing back to its roots. It has also been claimed that the relationship approach to marketing represents a paradigm shift in marketing (Hougaard and Bjerre 2004 29). This idea has been furthered by Grönroos 1990, Grönroos 1992, Morgan and Hunt 1994, Gummesson 1996.

Relationship Marketing is company behavior with the purpose of establishing, maintaining and developing competitive and profitable customer relationship to the benefit of both the parties.

> One important aspect of the relationship marketing definition requires attention. The seeming philanthropy of the altruistic sentiments implied by relationship marketing (mutuality, equality...) might seem to contradict the fact that the profit motive is still the principal business driver. The difference between relationship marketing and traditional marketing is that relationship marketing to some extent replaces the idea of manipulation with the idea of cooperation, subject however to differences in regulating mechanisms. Terminating relationships that are not profitable is an underlying assumption behind the above definition (Hougaard and Bjerre 2004 40).

However, with the growing acceptance of relational concept, some researchers have drawn on the philosophy of science and begun to analyze this proposition more subtly. Using Thomas Kuhn's theoretical framework, Backhaus 1997 has formulated two indispensable conditions which must hold if a new concept is to represent a paradigm shift in marketing theory: (a) a new paradigm must cover all issues and facts in the field, and (b) new methods and tools for theoretical analysis must be provided. Relationship Marketing may not be relevant in certain exchange constellations (e.g. situations where hit-and-run strategies are more appropriate) and it draws on preexisting constructs and solutions (e.g. customer satisfaction, trust), rather than creating new ones. Backhaus therefore concludes

that relationship marketing (despite its undisputed importance) does not meet the required conditions and therefore does not represent a paradigm shift for marketing theory. Brown 2000 too takes pugnacious position on this (Hennig-Thurau and Hansen 2000).

"Right or wrong, the customer is always right," said American retailer Marshall Field. "The customer is King," said department store founder John Wanamaker. Yet finding good service and responsiveness in America has been termed a "bloody miracle". Why do some organizations keep the central reason for their being in clear focus, while others do not? And what has to be done in order to make the organization, and the people who work in it, stay centered on the prime objective of satisfaction of customer need (Sherman with Sherman 1999)?

Relationship building with customers is currently the over-riding goal of marketing (Webster 1992 1-17). In service industries, the goal is especially desired since a relationship customer- whether a repeat, upgrade or cross product buyer, costs significantly lower than a new customers. Similar costing is evident when for finding customers to replace the customers lost inadvertently (Berry 1983 25-28).

With a view to build and strengthen relationship with customers, service marketers stand recommended to employ an extended marketing mix (Lovelock, Wirtz and Keh 2001). Consisting of Seven Ps- in place of the more commonly used Four Ps, the service marketing mix includes Product, Price, Place, Promotion, Personnel, Process and Physical facilities. Each of the service marketing mix element is well defined and documented in marketing literature. Each has its own as well as contributory impact in satisfying customers and in building longer-term relationships with them (Zeithaml and Bitner 1996).

Retaining customers is the buzzword. A renewed or intensified customer focus can facilitate more effective and efficient customer services, increase revenues ethically, and provide growth in major value adding and trust building segments.

Prof. Fredrick Reich at Harvard Business School notes "a five percent improvement in customer retention can result in a 75 percent increase in profitability" (Reich 1999). The profitability depends entirely on the customer retention capabilities. In this fast paced world where many players frequent the marketplace it is very important to maintain continual relationship with customers. This customer orientation helps them to get, enhance and maintain customer loyalty. They are therefore employing customer relationship strategies to reinvigorate their business, retain customers for longer period and remain successful through positive word of mouth campaign. The same can not be said about Hospitals, not that they do not want to retain the customers, but the repeated visits of the customers/patients reflects poorly on the hospital services.

Developments in IT, data warehousing and data mining have made it possible for firms to maintain a one to one relationship with their customers. Firms can now manage every single contact with the customer through account management personnel, call centers, interactive voice response systems, on-line dial-up applications, and Website to build lasting relationships. The interactions can be used to glean information and insights about customer needs and their buying behavior to design and develop services, which help create value for the customers as well as the firms. Although customized as well as off the shelf technological solutions are available in the marketplace, businesses need to do a lot more than just adopt these solutions to implement CRM practices. The players are even learning the nuances of attrition management, i.e. winning back those who had resolved to leave them.

Given the dramatic effect that improved customer retention can have on business profitability, the hospitals need an approach that leads to greater loyalty, enhanced relation and profitability. This in turn requires them to better understand how to measure customer retention; identification of root causes of defection and related key service issues; and the development of corrective action to improve retention.

1.3 Healthcare Sector

The Healthcare Sector broadly comprises of:

- Hospitals,
- Medical Tourism,
- Health and Health Management Education,
- Health insurance,
- Laboratory and Diagnostic Services,
- Pharmaceuticals & Drugs Segment,
- Medical Devices and Equipment,
- Registries,
- Healthcare BPO,
- Telemedicine
- Immunology, and
- Managed Care.

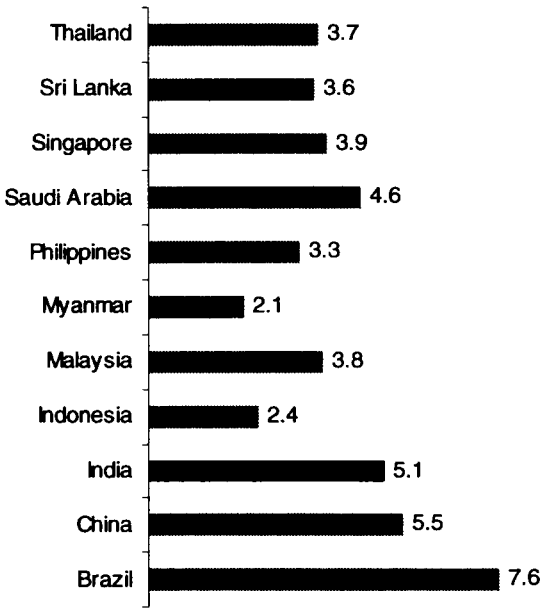
1.3.1 Healthcare Market

While the Healthcare sector is very broad and consists of many segments as listed above, we are restricting this study to Hospitals only.

Till some years back the very talk of Corporate Healthcare market in terms of Hospitals would have been too far fetched in the Indian scenario. Indrajit Basu for UPI Calcutta avers "A year ago, when the start-up fever was at its peak, the mention of healthcare start-ups would have drawn startled stares. It somehow did not fit. Today the scene is strikingly different. A varied crew of people -- ranging from industrialists like Prathap C. Reddy of Apollo Hospital group, and Reliance Group, to young, just-qualified MBAs -- is transforming India into a regional healthcare hub. Supporting these initiatives are financial intermediaries like the International Finance Corporation, and consultants like McKinsey & Co and Asian

Health Services. While they rake in the greenbacks advising healthcare investors on how to cash in on the boom they say healthcare is India's next big business opportunity (Medserv website article)".

Fig 1.2: Health expenditure as % of GDP in 2001



Source: IBEF

A majority of the private sector hospitals are small establishments with 85% of them having less than 25 beds. Private tertiary care institutions providing specialty and super specialty care, account for only 1 to 2% of the total number of institutions while corporate hospitals constitute less than 1%. The private sector accounts for 82% of all out patient visits and 52% of hospitalization at all India level (Danish Trade Council 2005).

The scenario is witnessing substantial changes, although, in the present times too the so called Charitable hospitals rule the roost and many of the corporate ones too have some or the other "Not for profit" labels ostensibly attached. None

the less the marketplace is surging with competition across the segments. The small towns too are calling the shots with the ever booming healthcare sector. The healthcare sector in India is in the growth stage and hence the challenges are far too many. Rapid advancement in innovative and supporting technologies has contributed to its growth in terms of reach and volume of the healthcare sector.

In India healthcare is about to explode: the sector, comprising sectors like hospitals, health insurance, and managed care is worth $15 billion translating to Rs. 670 billion currently (that's almost equal to the turnover of the country's 12 largest private sector companies including Reliance Industries, Hindustan Lever and ITC). But that's just the tease. "The real McCoy, lies in the fact that India's healthcare sector is expected to grow by around 13 percent a year for the next five years", said Amit Bagaria of Asian Health Services (Medserv website article).

Healthcare industry in developing world is all set to grow exponentially and India with its inherent qualities can become the global hub for healthcare services. It is being touted as the next 'big boom' and the sector is expected to grow rapidly over the next decade, to reach a level of Rs. 3200 billion by 2012, largely spurred by an increased corporate presence in the sector. The need of the hour is to understand this market and plan future strategies to harness the lying opportunity (Industry Insight 2006).

India's healthcare industry is worth $23 billion today or roughly 4% of GDP. The industry is expected to grow by around 13% per year for the next four years. In India more than 50% of the total health expenditure comes from individuals as against a state level contribution of below 30%. The government funds allocated to healthcare sector have always been low in relation to the population of the country. In the private sector healthcare industry, healthcare facilities are run for profit by companies. Healthcare facilities run by charitable organizations also provide services totally free or at very low costs depending on the income of the

patient or patient's family. The pharma market turnover was over $ 8 billion for year 2003-2004 and the exports were $ 3.5 billion. The pharma sector is growing at an annual rate of 9%. Looking at Indian healthcare market in a Pan India perspective more than half million doctors are employed in 15097 hospitals. Additionally there are 0.75 million nurses who look after more than 870,000 hospital beds (Danish Trade Council 2005).

The healthcare sector has been growing at a frenetic pace in the past few years. The windfall began ever since the developed world discovered that it could get quality service for less than half the price.

- In the last five years, the number of patients visiting India for medical treatment has risen from 10,000 to about 100,000. According to Apollo group chairman Prathap Reddy, one out of every ten patients treated at his hospitals is from abroad.
- With an annual growth rate of 30 percent, India is already inching closer to Singapore, an established medicare hub that attracts 150,000 medical tourists a year.
- Hospitals in India boast of conducting the latest surgeries at a very low cost.

Table 1.1: Surgery Costs Comparison

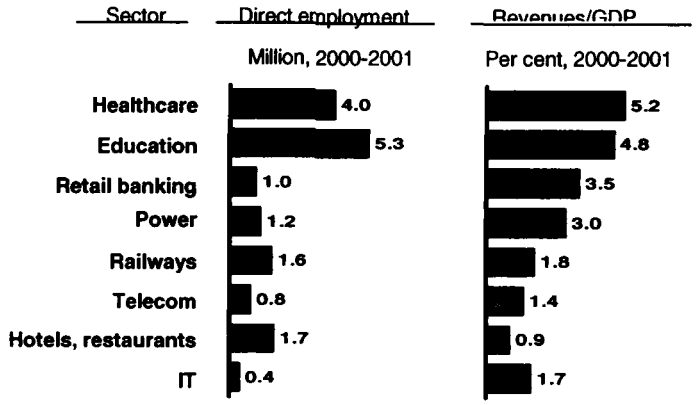
Surgery	US	Thailand	India
Bone Marrow Transplant	400,000	62,500	30,000
Liver Transplant	500,000	75,000	40,000
Open Heart Surgery (CABG)	50,000	14,250	4,400
Neuro Surgery	29,000	17,500	8,000
Knee Surgery	16,000	7,000	4,500

Source: India Brand Equity Foundation Research Feb 2005
Figures in USD

The healthcare industry employs over four million people, which makes it one of the largest service sectors in the economy. CII - Mckinsey & Co. in October 2002 made the forecast that:

- At the current pace of growth, healthcare tourism alone can rake in over $2 billion as additional revenue by 2012.
- Healthcare spending in the country will double over the next 10 years. Private healthcare will form a large chunk of this spending, rising from Rs. 690 billion ($14.8 billion) to Rs. 1,560 billion ($33.6 billion) in 2012. This figure could rise by an additional Rs. 390 billion ($8.4 billion) if health insurance cover is available to the rich and the middle class.
- Voluntary health insurance market is estimated at Rs. 4 billion ($86.3 million) currently but is growing fast. Industry estimates put the figure at Rs. 130 billion ($2.8 billion) by 2005.
- With the expected increase in the pharmaceutical market, the total healthcare market could rise from Rs. 1,030 billion ($22.2 billion) currently (5.2 percent of GDP) to Rs. 2,320 billion ($50 billion)-Rs. 3,200 billion ($69 billion) (6.2-8.5 percent of GDP) by 2012.

Fig 1.3: Revenues/GDP and Employment across various Sectors in India



Revenues: Largest service industry
Employment: Second largest after education

Source: National Accounts Statistics, 2001; Manpower profile; CBHI; *McKinsey analysis*

1.3.1.1 Government support

Last year, the finance minister announced a list of incentives for private hospitals to create and upgrade infrastructure, as well as reduce their operational costs:

- Tax sops to financial institutions lending to private groups setting up hospitals with 100 or more beds.
- Increase in the rate of depreciation from 25 percent to 40 percent for life-saving medical equipment.

Now, state governments, private hospital groups and even travel agencies have joined the fray.

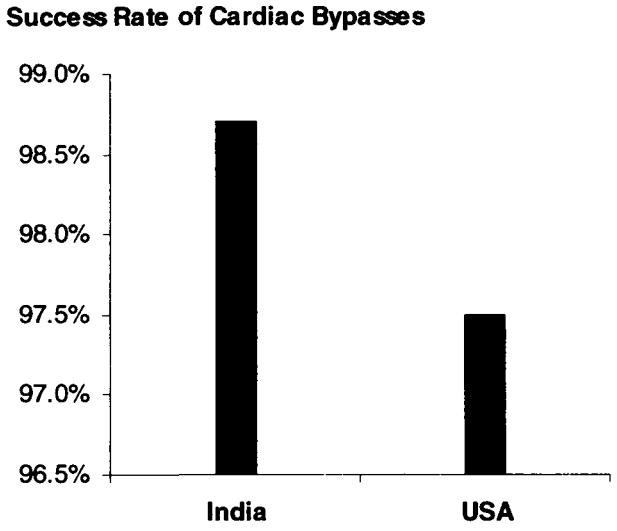
- Leading travel houses like SITA and Kuoni (Now SITA is a division of Kuoni) have tied up with overseas players that focus on medical tourism.
- The Karnataka government is setting up Bangalore International Health City Corporation, which will cater to international patients for a wide variety of health care products and treatments.
- The Asian Heart Institute at Mumbai's Bandra-Kurla Complex offers state-of-the art facilities for all types of heart complications. It has been set up in collaboration with the Cleveland Institute, US, and offers quality service at a reasonable cost.

However, it is not only the cost advantage that keeps the sector ticking. It has a high success rate and a growing credibility.

- Escorts Hospital, for instance, is one of the only handful treatment facilities worldwide that specialize in robotic surgery. The death rate of coronary bypass patients at Escorts is 0.8 per cent. By contrast, the 1999 death rate for the same procedure at New York-Presbyterian Hospital, was 2.35 per cent, according to a 2002 study by the New York State Health Department. Incidentally, Former US President Bill

Clinton recently underwent bypass surgery at the Presbyterian Hospital.

Fig 1.4: Success rate of Cardiac bypasses India vs. USA



Source: IBEF

The overall success rate of cardiac bypasses is 98.7 per cent in India, as opposed to only 97.5 per cent in the United States.

- Indian specialists have performed over 500,000 major surgeries and over a million other surgical procedures including cardio-thoracic, neurological and cancer surgeries, with success rates at par with international standards.
- The success rate in the 43,000 cardiac surgeries till 2002 was 98.5 percent.
- India's success in 110 bone marrow transplants is 80 percent.
- The success rate in 6,000 renal transplants is 95 percent.

India's healthcare industry is thus both competitive on cost and quality. It is widely believed that there is not a single surgery/procedure, which is done

abroad but cannot be done in India. Apart from being in step with changing healthcare delivery technology, leading Indian medical care facilities are increasingly complying with stringent quality standards and queuing up for international accreditations, while The British Standards Institute has recently accredited the Delhi-based Escorts Hospital. Indraprastha Apollo Hospital and Wockhardt Hospitals have already been accredited by Joint Commission International (JCI).

Escorts Hospital too has already applied for Joint Commission International (JCI) accreditation, which id the Gold Standard for US and the European hospitals, from the Chicago-based Joint Commission of Accreditation of Hospital Organizations (JCAHO) – and the coveted certification is expected soon. With an increasing number of Indian hospitals offering services at the cutting edge, there is a growing acceptance of India-based medical care among global insurers. For instance US-based private health insurers Blue Cross and Blue Shield and British health insurer Bupa now insure clients treated at a number of private hospitals in India.

1.3.1.2 Opportunities

- India's independent credit rating agency CRISIL has assigned a grade A rating to super specialty hospitals like Escorts and multi specialty hospitals like Apollo.
- NHS of the UK has indicated that India is a favored destination for surgeries.

(The above listed statistics have been adapted from India Brand Equity Foundation Research).

Corporate hospitals failed a decade ago because they emerged in isolation and were not part of a larger healthcare phenomenon. He also opines that "But this time round it's different: you have insurance companies, hospital hardware and software companies etc, which have all come together to create this boom,"

Nevertheless, some of the segments of healthcare like corporate hospitals, insurance and managed care may indeed find competition in the country, but according to Asian Health Services, there are plenty of untapped opportunities for "entrepreneurs with drive." These include: day surgery centers, home healthcare services, medical office infrastructure, physician management firms, mobile clinics and the likes. "The stampede is yet to begin; if it does, not all of them may fall into neat categories, but the encouraging sign is, interest level is rising in this area," Bagaria said.

India is the second most populous country in the world with population currently over one billion mark. At the outset of its independence, she pursued socialist policies and programs. These are now changing in favor of free market principles. Waves of large scale liberalization of various sectors of the economy, privatization and globalization are stirring every part of the economy. The Indian economy ranks eleventh in the world with a Gross National Product (GNP) equivalent to US$ 736 billions (fourth on PPP basis with GNP being US$ 3.67 trillions).

The personal health sector is one such part of Indian economy that is witnessing sea changes. The country is now negotiating with an epidemiological transition wherein infectious diseases causing adult morbidity and mortality are disappearing or have already been eradicated. Non-infectious diseases are however, assuming menacing proportions. These include coronary heart diseases, diabetes, hypertension and neurological disorders. The transition to the lifestyle ailments has a lot to do with the socio-economic changes in India in the last two decades. 85% of the inpatients suffer from Cardiology, Oncology, trauma, maternity and acute infections. The World Bank Health Sectoral Priority Review projects a doubling of cardio-vascular disease mortality rate in India between 1985 and 2015.

Reflecting the transition, the Indian Ministry of Health and Family Welfare- the prime policy mover for Indian healthcare sector, has begun to stress on the

preventive, primitive, public health and rehabilitation aspects of health care. It also underlined the need of establishing comprehensive healthcare services to reach the population in all areas of the country through inviting and integrating private participation in funding healthcare at the secondary and tertiary level. During the last two decades, state spending on healthcare was overtaken by the private spending. In 1987, the governmental share in healthcare funding was 1.6% out of a total of 4.3% of GDP spent on healthcare. In 1990, the government's share declined to 1.3%, while the private sector share increased to 4.7%. This trend of declining governmental spending will only gain further momentum. The states are to focus on primary healthcare, leaving the secondary and tertiary levels of healthcare to the private sector.

Fig 1.5: Total expenditure on health as % of GDP, 1998-2002 in India

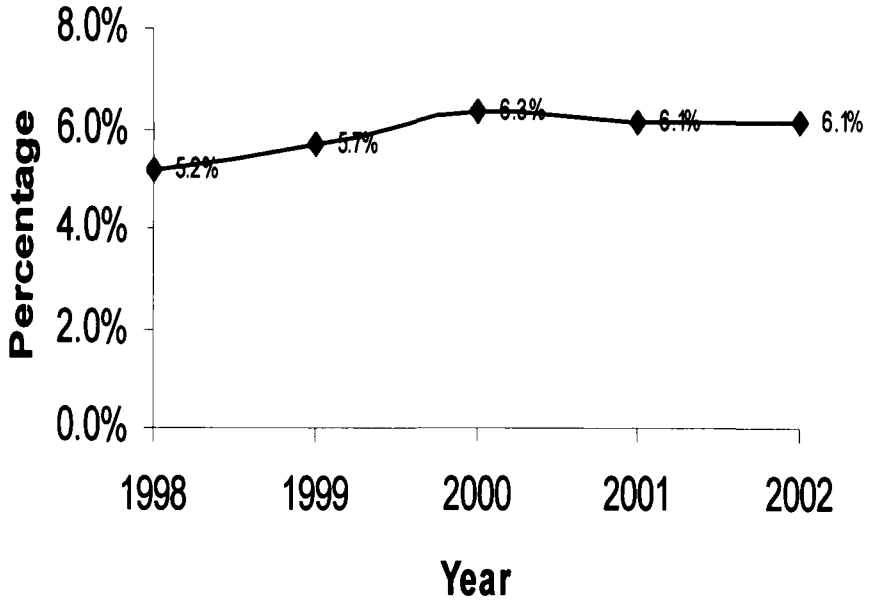
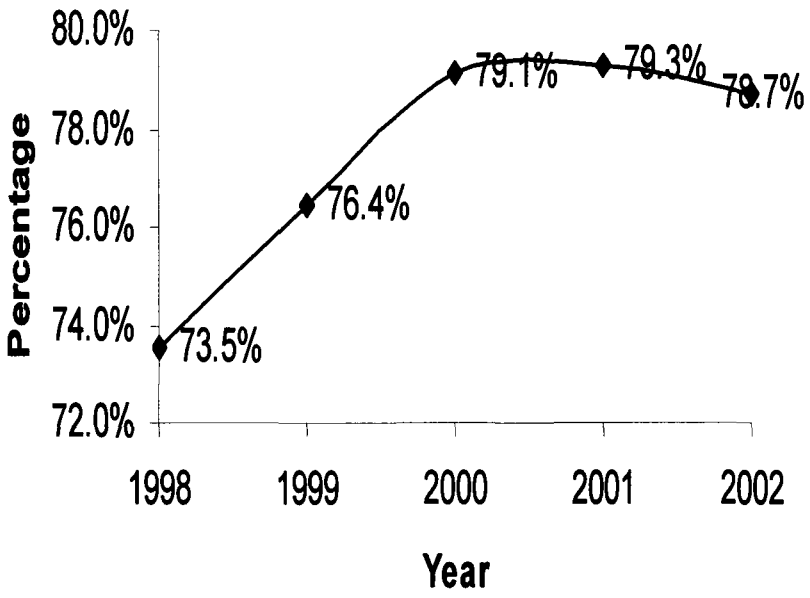


Fig 1.6: Private expenditure on health: % of total expenditure on health, 1998-2002



Source: Health indicators from the latest World Health Report

http //www3 who int/whosis/country/compare cfm?language=english&country=ind&indicator=strPrvEOHPctOfTotEOH2002

Thus, India's private hospitals are in for a rapid rise both in terms of volume and sophistication. A principle mode of growth has been though corporatization. The Chennai based Apollo Hospitals pioneered this new avatar of Indian hospitals in the early 80's. Many family business houses have set-up hospitals or lent their names in order to inject a public confidence in their hospitals. A few pharmaceutical companies like Wockhardt and Max India, have opened hospitals as they leverage on their core competence. Hospitals, nursing homes and healthcare centers require ever increasing capital investments in real-estate and medical infrastructure. The corporatization and entry of private entrepreneurs help them access equity markets and public funding to fund such projects.

Hospitals in India are now recognized as industry enabling the banks and financial institutions to fund hospital projects. Foreign Direct Investments (FDI) is

allowed in this sector with automatic approval up to 51% by way of foreign investment in equity. As a further acceleration, sweeping reforms are underway in respect of insurance sector especially in the health insurance. In India, approx. 60% of the total health expenditure comes from self paid category as against government's contribution of 25-30%. Currently in India, only 2 million people (0.2 % of total population of 1 billion), are covered under Mediclaim, whereas in developed nations like USA about 75 % of the total population are covered under one or another insurance scheme. A majority of private hospitals are expensive for a normal middle class family. Health insurance will make healthcare affordable to a large number of people.

Finally, the healthcare customer is changing qualitatively. The rise of literacy rate, higher levels of income and increasing awareness through deeper penetration of media, bring Indian consumer closer to quality healthcare. With nuclear families on the rise, the bread-earner of the family and indeed every member of the family now access regular health check-ups. All this contributes to the growth of the healthcare sector in India and for more medical facilities in private sector. With demand exceeding supply, India's healthcare industry is worth US$17 billion (a recent estimate of the Confederation of Indian Industries, New Delhi) and is expected to show a strong growth (over 13% by an industry estimate) for the present decade.

The private Indian healthcare sector has the following major corporate players:

- Apollo Group of Hospitals
- Fortis Healthcare includes Escorts
- Max Healthcare
- Wockhardt Hospitals Ltd.
- Birla Heart & Research Centre
- Aravind Eye Centre

1.3.1.3 Constraints

In spite of the reforms sweeping the healthcare sector in general, the Indian hospitals are constrained by several government regulations. To begin with, Indian hospitals are not allowed to advertise the way a telecom service marketer or a consumer goods marketer would. When millions of rupees in technology and infrastructure are invested in a hospital, it makes it less than fair. It impacts their efforts to survive, attract patients and to generate funds though deregulated marketing, they contend. Still, each corporate hospital has formulated its differentiated marketing strategy and business development plans to benefit from the opportunities and to relate better with their customers.

1.3.1.4 Marketing Strategies

The following are the common highlights of marketing strategies of Indian hospitals:

- Most private hospitals have invited eminent industrialists, celebrities and social personalities to their governing and policy making board. Their presence assures the general customers. At the same time, these industrialists on governing board bring business to the hospitals and offer patronage of their own firms.
- A few private hospitals offer token equity shares to their patrons, especially to the referral doctors. Share-holding, however small, bonds the two, creates a sense of ownership and forges partnership among the intermediaries.
- Hospitals assure attractive discounts on hospital billing of their referral doctors and their family.
- Most private hospitals segment the healthcare market carefully into institutional customers and individual customers.

- Indian private hospitals enter into longer term contracts with institutional customers assuring their services, offering lower rates and receiving committed business from these key clients.
- There is rampant revenue sharing among the general physicians at the primary health care levels and the specialist at the secondary and the tertiary levels. 'Cuts' as they are termed as, are demanded -and offered, generously to the referring physicians. The situation does not much differ even if the referring physician is working in an institutional customer with whom the hospitals have already a contract of assured business.
- Continuous knowledge enhancement of the doctors and frontline staff is now a priority and key to the survival and reputation of hospitals in India. A large portion of hospital outlay is now earmarked for staff (doctors as well as supporting staff) training, research and re-education.
- Technical upgradation and introduction of information technology is on the rise in Indian hospitals. IT is in use not only for attracting customers from non-neighboring locations, but it is also helping improve customer service.
- Loyalty based rewards are in operation in many hospitals.
- Segmentation is done more precisely as well as creatively. Instead of the traditional segmentation vases, like geographic and demographic, Indian private hospitals seek customers of desired psychographic nature irrespective of where they reside.
- Special niches are identified and filled in by the hospitals for smaller size customer clusters or needs.
- Customer focus and customer service are the new tools of hospital marketing.
- Free health check-ups at hospitals, mobile health van and sponsored health camps are organized to not only attract new customers but also to create a feel-good environment in their served markets.

- Seminars, workshops and technical presentations are organized on technical issues as well as on higher customer orientation and customer service.
- Co-branding - sharing hospital brand credits and marketing with other well-known brands in services and goods, is on the rise.
- Hospital ambience is (re)engineered at par with those of hotels.

(The above has been adapted from Agrawal and Borah, 2002).

1.4 Research Objective

The relevance of the research is both from industry and academic viewpoints. The objectives of this research are:

- To ascertain the Customer Service Quality perceptions vis-à-vis the expectations.

1.5 Research Sub Objectives

The research sub objectives to attain the main objective are:

- To understand the service standards maintenance thru responsiveness, reliability and assurance.

- To understand the convenience, empathy and tangibles delivery against the expectations.

1.6 Scope of the study

This study is descriptive in nature and will be conducted in phases. The first phase will deal with developing an appropriate research framework with facts and theories accessed from literature survey on Healthcare sector, Healthcare sector Analysis, and the current pattern of Customer Relation practices in the

Healthcare sector. The aim is to develop the framework, which will then be used to serve meeting the research objective and sub objectives.

The second phase of the study will be an empirical study of Hospitals through the beneficiaries. The research approach would be Survey Research, through structured questionnaire and Interviews. The standardized and validated questionnaire after due pilot testing and suitable changes, if any, will be used for this.

This study is limited in its approach. The retention strategies are being examined only in the context of Healthcare Sector with specific focus on corporate hospitals and their customers out of a total of numerous Hospitals in India spread across different geographical locations. While all the corporate hospitals in Delhi have been attended to personally for the questionnaire administration, some randomly chosen hospitals were sent the questionnaires by mail to seek the responses.

Yet the study is likely to contribute to the newly developing field of research on managing customer relationships, as issues are examined critically in the context of emerging Healthcare scenario. This will immensely help the Healthcare sector in integration of right attitudes with service delivery and customer relationships endeavors so as to take more and more market shares and hence profits. The Study will evoke scope for further research in this emerging field for ultimate benefit of society at large.

1.7 Rationale of the Study

The study idea was conceived from some prior personal experiences at the Government and Private Hospitals. The private hospitals have mostly been the so called charitable ones till recently. Subsequently the concept has been giving way to corporatization in the healthcare sector. The corporatization has led to

India getting noticed at the world stage too starting with Pakistan, more on an empathetic note. Lately the whole thing has taken the shape of Medical Tourism also. This gradual but distinct evolution has led to a revolution in the healthcare services. Are we geared up to take on the global healthcare services market, especially on the service levels? The expectations and perceptions gap will give us some insight into the affairs and hence the state of preparedness in standing up and getting counted.

On a practical note the Corporate and other interested hospitals can take a note of the subtleties that matter and are important to the all important Customers since the study brings out the metrics that matter. This study is more to do with Indian psyche since the standardized SERVQUAL questionnaire has been modified accordingly after a pilot. The original 22 questions of SERVQUAL for the Perceptions form the more recently defined scale referred popularly to as SERVPERF. The study can lead to further research in super specialty areas and the customizable requirements thereof.

1.8 Chapter Scheme

This thesis work has been divided into nine chapters; a brief outline of the chapter scheme is presented below:

Chapter1: Introduction
This chapter discusses the general concept of relationship marketing and the healthcare sector. The Chapter then details the research objectives, scope of study, and the rationale of the study.

Chapter 2: Literature Survey
This chapter would primarily, describe and summarize, on the earlier work done and compiled in Reports/Articles/Dissertations/Books and Journals in the area of Relationship marketing and other areas related to this research. The second part would primarily aim at throwing light on the Customer Relationships and

Management thereof. The third part details out the various aspects of the Healthcare sector, Medical Tourism, and the categories of services.

Chapter 3: Research Methodology

This chapter will explain the different variables to be examined, data to be collected, method of collection and the method of analysis to be used in this study.

Chapter 4: Customer relationships Analysis

This chapter would elaborate and summarize the analysis based on the consumer pattern as emerges from the data collected from the field.

Chapter 5: Summary and Conclusions

This chapter draws summary, key conclusion of this study and discusses the recommendation for effective customer relationships in the corporate hospital segment of the healthcare sector. The chapter also indicates the limitations and areas of future research.

Bibliography

Summary

In the preceding chapter the discussion has primarily been on a general and conceptual level. The discussion has centered on Relationship Marketing to start with. It is followed by the components of Healthcare sector and the size of the same. The growth rates and the sector metrics too have been identified. The competitive scenario as also the global certification and the other marketing strategies for better credibility establishment has been identified. The study has also taken up the constraints that confront the industry after discussing the opportunities available to them.

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CHAPTER II

LITERATURE SURVEY

2.1 Introduction

This chapter discusses the literature on the concepts of Relationship Marketing, Customer Retention, Customer Retention Marketing, Managing customer relations and Healthcare sector..

Part I: Relationship Marketing

2.2 Evolution of Relationship Marketing

Relationship marketing is the cornerstone of effective and long lasting Marketing efforts. We discuss here, under three different subsections, the evolution of Relationship Marketing as given by three different researches. The discussions are largely converging.

2.2.1 Service-Centric Businesses

The seeds of modern-day CRM were sown in the 1960s. Academic researchers found that the "4 Ps" marketing framework--product, price, place and promotion

was less valuable for industrial or service-centric businesses where ongoing relationships were critical. By the 1980s, "Relationship Marketing" was used to describe this new focus on understanding customer segments, delivering ongoing quality service, and achieving high customer satisfaction. Relationship marketing was about "putting the customer in the middle of the business circle," in the words of Dick Lee, principal of St. Paul-based Hi-Yield Marketing. "As part of that early relationship marketing movement, we had untold frustration because we didn't have the technology to support what we were doing," Lee says. "It really wasn't until mid-90s that we had the technology we needed (businessweek website)."

2.2.2 Retaining Customers

The origins of modern relationship marketing can be traced back to a passage by Schneider 1980, in which he observes: "What is surprising is that researchers and businessmen have concentrated far more on how to attract customers to products and services than on how to retain customers". The initial research was done by Len Berry 1982 at Texas A&M and Jagdish Sheth at Emory, both of whom were early users of the term "relationship marketing", and by marketing theorist Theodore Levitt 1983 at Harvard who broadened the scope of marketing beyond individual transactions.

In practice, relationship marketing originated in industrial and b-2-b markets where long-term contracts have been quite common for many years. Academics like Barbara Bund Jackson 1985 at Harvard re-examined these industrial marketing practices and applied them to marketing proper .

According to Len Berry 1983, relationship marketing can be applied: when there are alternatives to choose from; when the customer makes the selection decision; and when there is an ongoing and periodic desire for the product or service.

Fornell and Wernerfet 1987 used the term "defensive marketing" to describe attempts to reduce customer turnover and increase customer loyalty. This customer-retention approach was contrasted with "offensive marketing" which involved obtaining new customers and increasing customers' purchase frequency. Defensive marketing focused on reducing or managing the dissatisfaction of your customers, while offensive marketing focused on "liberating" dissatisfied customers from your competition and generating new customers. There are two components to defensive marketing: increasing customer satisfaction and increasing switching barriers.

Traditional marketing originated in the 1960s and 1970s as companies found it more difficult to sell consumer products. Its consumer market origins molded traditional marketing into a system suitable for selling relatively low-value products to masses of customers. Over the decades, attempts have been made to broaden the scope of marketing, relationship marketing being one of these attempts. Marketing has been greatly enriched by these contributions.

The practice of relationship marketing has been greatly facilitated by several generations of customer relationship management software.

2.2.2.1 The broad scope of relationship marketing

Relationship marketing has been strongly influenced by reengineering. According to reengineering theory, organizations should be structured according to complete tasks and processes rather than functions. That is, cross-functional teams should be responsible for a whole process, from beginning to end, rather than having the work go from one functional department to another. Traditional marketing is said to use the functional department approach. This can be seen in the traditional four P's of the marketing mix. Pricing, product management, promotion, and placement are claimed to be functional silos that must be accessed by the marketer if she is going to perform her task. According to Gordon 1999, the marketing mix approach is too limited to provide a usable framework for assessing

and developing customer relationships in many industries and should be replaced by an alternative model where the focus is on customers and relationships rather than markets and products.

In contrast, relationship marketing is cross-functional marketing. It is organized around processes that involve all aspects of the organization. In fact, some commentators prefer to call relationship marketing "relationship management" in recognition of the fact that it involves much more than that which is normally included in marketing.

Martin Christopher, Adrian Payne, and David Ballantyne 1991 at the Cranfield Graduate school of Management claim that relationship marketing has the potential to forge a new synthesis between quality management, customer service management, and marketing. They see marketing and customer service as inseperable.

In spite of this broad scope, relationship marketing has not lost its core marketing orientation though. It involves the application of the marketing philosophy to all parts of the organization. Every employee is said to be a "part-time marketer". The way Regis McKenna 1991 puts it:

> "Marketing is not a function, it is a way of doing business . . . marketing has to be all pervasive, part of everyone's job description, from the receptionist to the board of directors."

Because of this, it is claimed that relationship marketing is a more pure form of marketing than traditional marketing.

2.2.2.2 Internal marketing

Relationship marketing stresses what it calls internal marketing. This refers to using marketing techniques within the organization itself. It is claimed that many of the traditional marketing concepts can be used to determine what the needs of "internal customers" are. According to this

theory, every employee, team, or department in the company is simultaneously a supplier and a customer of services and products. An employee obtains a service at a point in the value chain and then provides a service to another employee further along the value chain. If internal marketing is effective, every employee will both provide and receive exceptional service from and to other employees. It also helps employees understand the significance of their roles and how their roles relate to others'. If implemented well, it can also encourage every employee to see the process in terms of the customer's perception of value added, and the organization's strategic mission. Further it is claimed that an effective internal marketing program is a prerequisite for effective external marketing efforts (George 1990).

2.2.2.3 The six markets model

Adrian Payne 1991 from Cranfield University goes further. He identifies six markets which he claims are central to relationship marketing. They are: internal markets, supplier markets, recruitment markets, referral markets, influence markets, and customer markets.

Referral marketing is developing and implementing a marketing plan to stimulate referrals. Although it may take months before you see the effect of referral marketing, this is often the most effective part of an overall marketing plan and the best use of resources.

Marketing to suppliers is aimed at ensuring a long-term conflict-free relationship in which all parties understand each other's needs and exceed each other's expectations. Such a strategy can reduce costs and improve quality.

Influence markets involve a wide range of sub-markets including: government regulators, standards bodies, lobbyists, stockholders, bankers, venture capitalists, financial analysts, stockbrokers, consumer

associations, environmental associations, and labour associations. These activities are typically carried out by the public relations department, but relationship marketers feel that marketing to all six markets is the responsibility of everyone in the organization.

At times Payne sub-divides customer markets into existing customers and potential customer, yielding seven rather than six markets. He claims that each market will require its own strategies and recommends separate marketing mixes for each of the seven (wikipedia website).

2.2.3 Economics Route – Transactions and Exchanges

Although marketing practices can be traced back as far as 7000 B.C. (Carratu 1987), marketing thought as a distinct discipline was borne out of economics around the beginning of this century. As the discipline gained momentum, and developed through the first three quarters of the twentieth century, the primary focus was on transactions and exchanges. However, the development of marketing as a field of study and practice is undergoing a reconceptualization in its orientation from transactions to relationships (Kotler 1990; Webster 1992). The emphasis on relationships as opposed to transaction based exchanges is very likely to redefine the domain of marketing (Sheth, Gardener and Garett 1988). Indeed, the emergence of a relationship marketing school of thought is imminent given the growing interest of marketing scholars in the relational paradigm.

Relationship marketing is a form of marketing that evolved from direct response marketing in the 1960s and emerged in the 1980s, in which emphasis is placed on building longer term relationships with customers rather than on individual transactions. It involves understanding the customers' needs as they go through their life cycles. It emphasizes providing a range of products or services to existing customers as they need them.

The paradigm shift from transactions to relationships is associated with the return of direct marketing both in business-to-business and business-to-consumer markets. As in the pre-industrial era (characterized by direct marketing practices of agricultural and artifact producers) once again direct marketing, albeit in a different form, is becoming popular, and consequently so is the relationship orientation of marketers. When producers and consumers directly deal with each other, there is a greater potential for emotional bonding that transcends economic exchange. They can understand and appreciate each others' needs and constraints better, are more inclined to cooperate with one another, and thus, become more relationship oriented. This is in contrast to the exchange orientation of the middlemen (sellers and buyers). To the middlemen, especially the wholesalers, the economics of transactions are more important, and therefore, they are less emotionally attached to products. Indeed, many middlemen do not physically see, feel, touch products but simply act as agents and take title to the goods for financing and risk sharing (Sheth and Parvatiyar 1999).

As with each new shift in the focus of marketing, there are advocates and critics of the relationship focus in marketing. However, in the same way as Kotler 1972 46 observed about other shifts in marketing, the emergence of a relationship focus will provide a "refreshed and expanded self concept" to marketing. The optimism stems from at least four observations: (i) relationship marketing has caught the fancy of scholars in many parts of the world, including North America, Europe, Australia and Asia, as is evident from some of the recent conferences held on this subject (Sheth and Parvatiyar 1994); (ii) its scope is wide enough to cover the entire spectrum of marketing's subdisciplines, including channels, business-to-business marketing, services marketing, marketing research, customer behavior, marketing communication, marketing strategy, international marketing and direct marketing; (iii) like other sciences, marketing is an evolving discipline, and has developed a system of extension, revision and updating its fundamental knowledge (Bass 1993); and (iv) scholars who at one time were

leading proponents of the exchange paradigm, such as Bagozzi 1974, Kotler 1972, and Hunt 1983, are now intrigued by the relational aspects of marketing (Bagozzi 1994; Kotler 1994; Morgan and Hunt 1994).

While relationship focus in the post-industrial era is a clear paradigm shift from the exchange focus of the industrial era, it is really a rebirth of marketing practices of the pre-industrial age when the producers and users were also sellers and buyers and engaged in market behaviors that reduced the uncertainty of future supply and demand assurances which could not be otherwise guaranteed due to the unpredictability of weather, raw materials, and customers' buying power (Sheth and Parvatiyar 1999).

Relationship marketing attempts to involve and integrate customers, suppliers and other infrastructural partners into a firm's developmental and marketing activities (McKenna 1991; Shani and Chalasani 1991). Such involvement results in close interactive relationships with suppliers, customers or other value chain partners of the firm. Interactive relationships between marketing actors are inherent as compared to the arm's length relationships implied under the transactional orientation (Parvatiyar, Sheth and Whittington 1992). An integrative relationship assumes overlap in the plans and processes of the interacting parties and suggests close economic, emotional and structural bonds among them. It reflects interdependence rather than independence of choice among the parties; and it emphasizes cooperation rather than competition and consequent conflict among the marketing actors. Thus, development of relationship marketing points to a significant shift in the maxims of marketing: *competition and conflict* to *mutual cooperation*, and *choice independence* to *mutual interdependence*. The purpose of relationship marketing is, therefore, to enhance marketing productivity by achieving efficiency and effectiveness (Sheth and Sisodia 1995).

The institutional thought of marketing was modified by the organizational dynamics viewpoint, and marketing thinking was influenced by other social

sciences, such as psychology, sociology and anthropology, exchange remained and still remains the central tenet of marketing (Alderson 1965; Bagozzi 1974, 1978, 1979; Houston 1994; Kotler 1972). Formal marketing theory developed around the idea of exchange and exchange relationships, placing considerable emphasis on outcomes, experiences and actions related to transactions (Bagozzi 1979). Recently several scholars have begun to question the exchange paradigm, and its ability to explain the growing phenomena of relational engagement of firms (e.g. Grönroos 1990; Sheth, Gardener and Garrett 1988, Webster 1992). In the recent past, researchers have tried to develop frameworks for relational engagement of buyers and sellers, often contrasting it with the exchange mode inherent in transactions (Arndt 1979; Ganesan 1994; Lyons, Krachenberg, and Henke 1990). Business practice exhorts the customer and supplier firms to seek close, collaborative relationships with each other (Copulsky and Wolf 1990; Goldberg 1988; Katz 1988). This change in focus from value exchanges to value-creation relationships have led companies to develop a more integrative approach in marketing, one in which other firms are not always competitors and rivals but, are considered partners in providing value to the consumer. This has resulted in the growth of many partnering relationships such as business alliances and cooperative marketing ventures (Anderson and Narus 1990; Johnston and Lawrence 1988). Close, cooperative and interdependent relationships are seen to be of greater value than purely transactions based relationship (Kalwani and Narayandas 1995). However, the relationship orientation of marketing is not an entirely new phenomenon. If we look back to the practice of marketing before the 1900s, we find that relationship orientation to marketing was quite common and widespread. Although history of marketing thought dates back to only the early 1900s (Bartels 1962), marketing practices existed in history, even to pre-history (Nevett and Nevett 1987; Pryor 1977; Walle 1987). During the agricultural era, the concept of "domesticated markets" and "relationship orientation" were equally prevalent. In short, current popularity of relationship marketing is a reincarnation of the marketing practices of the pre-industrial era in which producers and consumers interacted directly with each

other and developed emotional and structural bonds in their economic market behaviors.

Relationship-orientation in marketing has staged a comeback. It was only during the peak of industrialization that marketing's orientation shifted toward a transactional approach. With the advent of middlemen, and the separation of producers and users, there was a greater transactions orientation. Industrialization led to a reversal in the relationship between supply and demand, when due to mass production efforts producers created excess supply of goods and services and were them selves preoccupied with achieving production efficiencies. Thus, they needed middlemen to service the customer. The middlemen in turn, adopted a transactional approach as they were more interested in the economic benefits of exchange than the value of production and/or consumption. Although efficiencies in product distribution were achieved through middlemen, effectiveness was not always accomplished as was evident from the literature on channel conflict. Now with one-to-one connect between the producer and user, relationship orientation in marketing has returned (Sheth and Parvatiyar 1999).

2.3 When to use relationship marketing

Relationship marketing and transactional marketing are not mutually exclusive and there is no need for a conflict between them. However, one approach may be more suitable in some situations than in others. Transactional marketing is most appropriate when marketing relatively low value consumer products, when the product is a commodity, when switching costs are low, when customers prefer single transactions to relationships, and when customer involvement in production is low. When the reverse of all the above is true, as in typical industrial and service markets, then relationship marketing can be more appropriate. Most firms should be blending the two approaches to match their portfolio of products and services. Virtually all products have a service component to them and this

service component has been getting larger in recent decades (wikipedia website).

2.4 Criticisms of relationship marketing

Internal marketing and the six markets model has been criticised as not really being marketing at all. At the core of marketing is the marketing philosophy of first determining what the market wants, then providing it. It is doubtful that this is what is occurring in influence markets, supplier markets, recruitment markets, or internal markets. What is occurring is closer to public relations, persuasion, and management. It appears to be marketing because it uses some marketing techniques, but it would more accurately be described as salesmanship.

Relationship theorists tend to compare themselves to traditional marketing. In doing so they frequently present traditional marketing in an unfavourable light. For example, Adrian Payne 1991 claims that traditional marketing concentrates on product features, has minimal interest in customer service, limited customer contact, and quality is primarily a concern of production. Although there may still be some marketers that think this way, these statements have not reflected marketing best practices for more than three decades.

2.5 Customer Retention

In the post-industrialization period the increase in competitive intensity is forcing marketers to be concerned with customer retention. As several studies have indicated, retaining customers is less expensive and perhaps a more sustainable competitive advantage than acquiring new customers. Marketers are realizing that it costs less to retain customers than to compete for new ones (Rosenberg & Czepiel 1984). On the supply side it pays more to develop closer relationships with a few suppliers than to develop more vendors (Hayes, Wheelwright and Clark 1988; Spekman 1988). In addition, several marketers are also concerned with keeping customers for life, rather than merely making a one-time sale (Cannie and Caplin 1991).

At the core of relationship marketing is the notion of customer retention. According to Gordon 1999, relationship marketing involves the creation of new and mutual value between a supplier and individual customer. Novelty and mutuality deepen, extend and prolong relationships, creating yet more opportunities for customer and supplier to benefit one another.

Studies in several industries have shown that the cost of retaining an existing customer is only about 10% of the cost of acquiring a new customer so it can often make economic sense to pay more attention to existing customers.

It is claimed by Reichheld and Sasser 1990, that a 5% improvement in customer retention can cause an increase in profitability of between 25 and 85 percent (in terms of net present value) depending on the industry. However Carrol and Reichheld 1992, dispute these calculations, claiming they result from faulty cross-sectional analysis.

According to Buchanan and Gilles 1990, the increased profitability associated with customer retention efforts occurs because:

- The cost of acquisition occur only at the beginning of a relationship, so the longer the relationship, the lower the amortized cost.
- Account maintenance costs decline as a percentage of total costs (or as a percentage of revenue).
- Long-term customers tend to be less inclined to switch, and also tend to be less price sensitive. This can result in stable unit sales volume and increases in dollar-sales volume.
- Long-term customers may initiate free word of mouth promotions and referrals.
- Long-term customers are more likely to purchase ancillary products and high margin supplemental products.

- Customers that stay with you tend to be satisfied with the relationship and are less likely to switch to competitors, making it difficult for competitors to enter the market or gain market share.
- Regular customers tend to be less expensive to service because they are familiar with the process, require less "education", and are consistent in their order placement.
- Increased customer retention and loyalty makes the employees' jobs easier and more satisfying. In turn, happy employees feed back into better customer satisfaction in a virtuous circle.

Relationship marketers speak of the "relationship ladder of customer loyalty". It groups types of customers according to their level of loyalty. The ladder's first rung consists of "prospects", that is, people that have not purchased yet but are likely to in the future. This is followed by the successive rungs of "customer", "client", "supporter", advocate", and "partner". The relationship marketer's objective is to "help" customers get as high up the ladder as possible. This usually involves providing more personalized service and by providing service quality that exceeds expectations at each step.

Customer retention efforts involve considerations such as the following:

1. Customer valuation - Gordon 1999 describes how to value customers and categorize them according to their financial and strategic value so that companies can decide where to invest for deeper relationships and which relationships served differently or even terminated.
2. Customer retention measurement - Dawkins and Reichheld 1990 calculated a company's "customer retention rate". This is simply the percentage of customers at the beginning of the year that are still customers by the end of the year. In accordance with this statistic, an increase in retention rate from 80% to 90% is associated with a doubling of the average life of a customer relationship from 5 to 10 years. This ratio

can be used to make comparisons between products, between market segments, and over time.

3. Determine reasons for defection - Look for the root causes, not mere symptoms. This involves probing for details when talking to former customers. Other techniques include the analysis of customers' complaints and competitive benchmarking.
4. Develop and implement a corrective plan - This could involve actions to improve employee practices, using benchmarking to determine best corrective practices, visible endorsement of top management, adjustments to the company's reward and recognition systems, and the use of "recovery teams" to eliminate the causes of defections.

A technique to calculate the value to a firm of a sustained customer relationship has been developed. This calculation is typically called customer lifetime value.

Customer lifetime value (also variously referred to as lifetime customer value or just lifetime value, and abbreviated CLV, LCV, or LTV) is a marketing metric that projects the value of a customer over the entire history of that customer's relationship with a company. Use of customer lifetime value as a marketing metric tends to place greater emphasis on customer service and long-term customer satisfaction, rather than on maximizing short-term sales.

Calculating customer lifetime value

Customer lifetime value has intuitive appeal as a marketing metric, because in theory it allows companies to know exactly how much each customer is worth in dollar terms, and therefore exactly how much a marketing department should be willing to spend to acquire each customer. In reality, it is often difficult to make such calculations, either due to the complexity of the calculations, or to the lack of reliable input data, or both.

The specific calculation depends on the nature of the customer relationship. For example, companies with a monthly billing cycle, such as mobile phone operators, can count on a reasonably reliable stream of recurring revenue from each customer. Car manufacturers, on the other hand, have less insight into when or whether a customer will make a repeat purchase. Nevertheless, certain data inputs are commonly used when making customer lifetime value calculations.

Acquisition cost

The amount of money a marketing department has to spend, on average, to acquire a single new customer.

Churn rate

The percentage of customers who end their relationship with a company in a given time period. Churn rate typically applies to subscription services, such as internet services, telecom subscriptions, credit card subscription or magazines.

Discount rate

The cost of capital used to discount future revenue from a customer. Discounting is an advanced topic that is frequently ignored in customer lifetime value calculations. The current interest rate is sometimes used as a simple (but incorrect) proxy for discount rate.

Retention cost

The amount of money a company has to spend in a given time period to retain an existing customer. Retention costs include customer support, billing, promotional incentives, etc.

Time period

The unit of time into which a customer relationship is divided for analysis. A year is the most commonly used time period. Customer lifetime value is a multiperiod calculation, usually stretching 3-7 years into the future. In practice, analysis beyond this point is viewed as too speculative to be reliable.

Retention strategies also build barriers to customer switching. This can be done by product bundling (that is, combining several products or services into one "package" and offering them at a single price), cross selling (that is, selling related products to current customers), cross promotions (that is, giving discounts or other promotional incentives to purchasers of related products), loyalty programs (that is, giving incentives for frequent purchases), increasing switching costs (that is, adding termination costs, such as mortgage termination fees), and integrating computer systems of multiple organizations (primarily in industrial marketing).

Many relationship marketers use a team-based approach. The rationale is that the more points of contact between the organizations, the stronger will be the bond, and the more secure the relationship.

2.6 Customer Retention Marketing

Customer Retention Marketing is a "tactically driven approach based on customer behavior." The theory behind it is that if the business is able retain its customers, it will succeed. A strong relationship exists between customer satisfaction and profitability. It is then necessary for service organizations to make certain that they are practicing customer retention marketing (Novo 2004).

Customer Retention Marketing is a theory that has been around for a very long time, but has just resurfaced again in the last few years. It reminds me of the different fads that teenagers go through. Bell-bottoms were popular in the 60's and now they have been again for the last few years.

Customer Retention Marketing is an offspring of Relationship Marketing. According to the Gordon 1998 it has the following eight components: culture and values, leadership, strategy, structure, people, technology, knowledge and insight, and process. The goal of Relationship Marketing is to align all these aspects of a company with its chosen customers. It is important to note that the explanation of these eight components will apply mostly to companies marketing to or through other businesses.

Culture and Values: It is important to understand the similarities and differences between cultures for each company at the very beginning. This will ensure that the relationship between the two companies will be an enduring one.

Leadership: Before committing to Relationship Marketing, the leadership from each company must understand the real meaning of a relationship.

Strategy: Each company involved needs to make sure the strategy is aligned and be sure that they both understand the direction of the other. Over time, this means that the supplier must become very familiar with its customer's customer.

Structure: Companies that reorganize frequently, without strategic context and rationale, often have difficulty defining a winning strategy. So it is important for companies to make sure that their structure is strong.

People:" People are key to any relationship." However, the people need to be productive and effective to make the relationship a good one. Front-line people need to be able to understand the customer and be able to communicate with them.

Technology: Businesses should use technology to give the customer a better memory of the company. Giving them the communications options they want will help them repeat the buying experience.

Knowledge and Insight: The key to this section is to know the customers, know the customers, and know the customers. A lot of businesses keep databases on their customers and use it to their advantage. It is important to spend a little money to do this.

Process: It would be beneficial for the business to focus its processes around existing customers, giving them the value they want and communicating with them as if they wish to be demanded by the company (Gordon 1998).

"The right customer retention marketing solution can fundamentally change the organization's profitability, customer satisfaction, and retention." So, many businesses use CRM to gain just that, profitability, customer satisfaction and retention. Doing this isn't always the easy part. A lot of times the right CRM solution for one company doesn't always work for another. It has to be the right mix for the right company. In order to ensure that a company has the right customer retention marketing mix, they must attend industry seminars to gain the appropriate skills and information necessary to attain the right level of Customer Retention Marketing. There are seminars that industries have to train them on CRM. These seminars are practical case study based seminars. Industry visionaries give detailed insights into how the business can benefit from the CRM revolution. Topics covered include: eCRM, mobile data, call centre, knowledge management, sales & marketing automation, marketing database, contact management, field service management, data warehousing, marketing strategy and many others (crmonline 2001 website).

In my opinion, not only the owners and managers of the business should attend these seminars, but also a few of the actual salespeople. This will mean that there is a contact from each department of the business represented and therefore, if any questions arise about CRM, the person can go to the representative who attended in their area and ask.

Another way for businesses to find out information about CRM is on the website, http://www.destinationcrm.com/. Here, businesses can sign up for a free e-newsletter giving them up-to-date information on the latest information on CRM training. This would benefit them tremendously. Not only that, they can also

create their own effective communications tool online to ensure that their employees are successfully communicating with each other and the customers.

There are several steps to implementing CRM with Customer Marketing in a business as per Curry 2000. They are:

1. Make a Customer Pyramid – This is defining who the customers are, gathering the behavior variables for them, and then decide on the segment border.
2. Keep Project Management Simple – This is simply creating a steering committee to control and oversee the process.
3. Conduct a Parameters Workshop – This is simply to decide on what information you have and need to have on the customers and where to find it.
4. Conduct Interviews with a Selection of Customers – This will include several stages. First of all, select a sample of 10 to 20% of the customers. Second, construct a customer interview questionnaire. Third, interview the customer selection. The reason to only interview a sample of the customers is:
    a. To get a view of current customer satisfaction levels and identify areas that need improvement.
    b. To determine the customer acceptance of the questionnaire so that it can be edited.
    c. To test the effectiveness of the various ways you can interview the customers i.e. face to face, by telephone, in writing, and via email.
5. Diagnose the Value of the Customers – In other words, diagnose the value of the customer profitability. The financial people in the business can figure the Customer-base Accounting or CBA. If this number is good they will be excited that the Marketing department is doing the right thing.
6. Diagnose the Behavior of the Customers – In this phase, a business can link the actual customer behavior and the information on factors that

affect that behavior. Then, it will be easy to calculate the potential of individual customers and prospects. After this is complete, it will be necessary to set specific goals and plans to meet those goals.

7. Diagnose the Satisfaction of the Customers – Interviewing the customers enables the business to improve their products, services and customer relationship processes. There are critics of the customer interview method. They argue that the interview may fall short on statistical reliability.

8. Diagnose the Customer Focus – The easiest way to do this is to ask the people who work on the floor who deal with customers every day what the customer's complaints etc. are. They will be the ones who can help management decide on how to do things better.

9. Make Decisions – This is the stage where it is necessary to decide what needs to be done. Getting CRM advice from experts is an excellent idea.

10. Start With a Customer Marketing Kick-off – This is a staged event where the whole business can begin to reach the following objectives.

a. Realize the importance of customers.

b. Begin the Customer Marketing Rollout, ie. what objectives and steps will be taken.

c. Figure out the results of the customer satisfaction survey.

d. Invite everyone to participate.

e.Demonstrate management commitment to improving customer relationships.

11. Have a Customer-Based Business Planning Workshop – This will bring people from top management, sales management and marketing management to decide on company goals.

12. Have Customer Team Workshops – This step is key to implementing CRM in your company. It consists of working with the customer team to discuss the customer marketing in the business.

13. Monitor Rollout Results – It is important to monitor the results vs. the plans the business has made (Curry, 2000).

Is Customer Relationship Marketing Profitable?

It is indeed true that big databases are expensive to develop and maintain. Different organizations like Wal-Mart have spent literally hundreds of millions of dollars on their technology to develop and maintain their database (Gamble 1999).In most marketing texts, it is known that acquiring customers is much more expensive than keeping them. Figures of between 5 times as much and 7 times as much are quoted (Kotler 1997).Thus, it is much more important to retain the customers you have than try to acquire new ones. In other words, Customer Relationship Marketing is profitable.

According to Gamble, Stone and Woodcock 1999, the benefits of customer relationship marketing are usually in one or more of the following areas:

1. Closer relationships with customers.
2. Improvements in customer satisfaction.
3. Financial benefits ensue.

Gamble, Stone and Woodcock 1999, also say that managers need to ensure that the customer relationship marketing philosophy follows the procedures listed below.

1. Obtain measures of retention.
2. Find out why customers are lost.
3. Calculate the lost profit.
4. Multiply that by the number of retrievable customers who are lost.

Therefore Customer Relationship Marketing is profitable. Businesses are crazy for not incorporating some sort of the customer relationship models. With all of the available resources and the Internet, it is almost crucial for businesses to develop one. As was stated earlier, it is more expensive to acquire customers than to retain them, so why not develop a plan?

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Part II: Managing Customer Relations

2.8 Customer Relationship Management

2.8.1 CRM – What it is?

Customer Relationship Management-or CRM- is an old subject that has become a hot topic.

Since the 1960s management gurus such as Peter Drucker and Theodore Levitt have been preaching the CRM gospel, which can be simply summarized like this:

> "The true business of every company is to make customers, keep customers, and maximize customer profitability."

This gospel was neglected by most companies-until recently (Curry 2000 ix).

Customer Relationship Management sounds simple enough. However, the term succeeds only in whetting imagination of academics as well as business leaders (Anton 1999; Baron 1997; Bell 1996).

CRM can be viewed in four principal ways.

- Firstly, it is a contemporary response to the emerging climate of unprecedented customer churn, waning brand loyalty and lower profitability (Cockburn 2000; Cross and Smith 1996).
- Secondly, CRM is central to the task of making an organization customer-centric (DMA 1999; Gamble, Stone and Woodcock 2000).
- Thirdly, CRM is the surest symbol embracing information technology in business (Brown and PWC 1999; Gordon 1998).

- Fourth and finally, CRM is the most certain way to increase value to the customers and profitability to the practicing organizations (Reichheld 1996, Shanham 1998-1999). Be that as it may, effective CRM practices can mean the difference between the success and failure of a business across all industries, particularly for mid-size enterprises (Curry 2000; Eckerson 1997), Naturally, more and more companies are seeking to understand the concept and mechanics of the CRM (Swift 2001).

So what is customer relationship management (CRM) all about?
The current literature is full of individual definitions and descriptions (Anton 1999; Brown 2000). Most definitions converge on two things - relationship and information technology. Thus, we may conceptualize customer relations management (CRM) as follows:

'CRM is the information technology face of the business processes that aims to establish enduring and mutually beneficial relationships with customers, in order to drive customer retention, value, and profitability up'.

The definition underlines the fact that CRM is meant for a common and equal good of the two stakeholders - business and their customers. It calls for capturing pertinent data about the prospective and current customers in respect of their buying patterns, shopping behavior and usage habits of the products and services and to use the information to commence a two-way dialogue with them.
If the essence of CRM is customer and continuity, the term CRM can as well be the acronym for any of the following cognate marketing terms:

- Caring Relations Management (CRM)
- Continuous Relations Management (CRM)
- Creative Relations Management (CRM)
- Customer Retention Management (CRM)

- Customer Return Management (CRM)
- Cost Reduction Management (CRM)
- Cost and Return Management (CRM)

In more ways than one, CRM represents a logical end of the philosophy that the business should be customer oriented (Gamble, Stone and Woodcock 2000; Payne 1997). It traversed the successive strains of thoughts to reach what is now viewed as a new business paradigm. For instance, the early marketing paradigms prevalent until the sixties, ordained marketers to satisfy customer needs that were essentially nature created. Later in the seventies, the marketing functions served the customer wants that were nothing but 'specific solutions' to the needs and were the outcome of the marketing initiatives. Marketing thoughts of the eighties devoted themselves to meet the higher, more lifestyle oriented demands and expectations of customers. These were the result of the then social and economic environment. The nineties witnessed the most potent force of our times, information technology. Naturally marketing thoughts focused on how to leverage on the same and serve the customers (Kotler, 2000). One of the fall out of the era is Customer relationship management. CRM, thus, represents 'the marriage between the customer orientation and the emerging information technology to produce a memorable relationship experience to the marketers as well as to the customers (Agrawal 2002).

2.8.2 CRM – A Dream Tool

The essence of CRM is to 'track and profit from the retained customers in the business portfolio'. Thus, CRM is a customer-focused strategy that mandates 'a fine coordination between people, process and technology'. A truly coordinated CRM is a tool for delivering on a variety of marketing dreams such as the following:

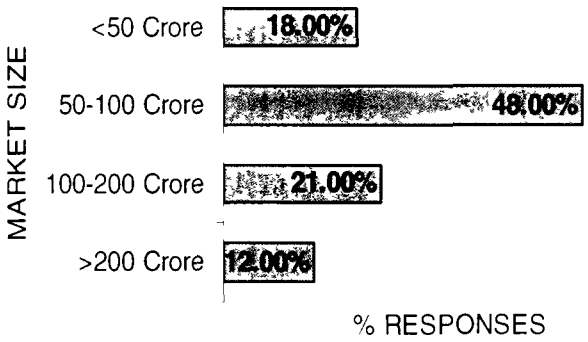
- Dream to target and serve customers on an individual basis. It permits a one-to-one marketing as opposed to mass marketing (Peppers and Rogers 1996).
- Dream to enjoy long term relationships with customers, especially with the profitable ones. CRM stresses commitment over flirting (Pearson 1995).
- Dream to disintermediarize and / or rid channels of the wasteful barriers and distortions. It helps disintermediarization and delayer distribution aspects (DMA 1999; Pearson 1995).
- Dream to reduce marketing cost progressively (Cockburn 2000).

The CRM concept and technology is more than just identifying who our customers are, providing them with a quality service and analyzing their preferences. The key dimensions of CRM that were largely ignored in the past are customer loyalty, churn reduction and customer profitability. A report published in the Harvard Business Review identified that an increase in customer loyalty by five percent could increase profits in telecom by over 50 percent (Cockburn 2000). A recent study by ICL for a UK Telco too highlights importance of retention of profitable customers, especially the top ten percent of profitable customers in terms of generating additional revenue and profit. For example, through a business model, it forecasts that a ten percent churn in the segment of top customers would reduce profits by more than 25 percent (Agrawal 2002).

2.8.3 Market Size

- The Indian CRM market can be sized at Rs. 50 -100 Crores (1Crore=10 million)
- The CRM market can be segmented into the market for software and services
- The services segment includes outsourced CRM services, integration, training, and consultancy.
- The market for CRM services is considerably larger than the market for CRM software.

Fig 2.1: Sizing the Indian CRM Market

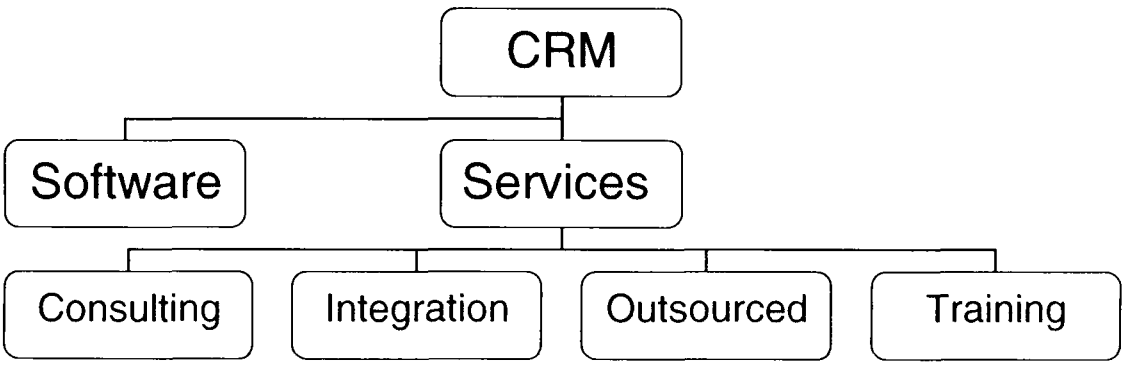


Observations and Inferences

- A clear majority of the respondents size the Indian CRM Market at Rs. 50 - 100 Crore range but with 33% of respondents putting the market at a size greater than Rs. 100 Crore; there could be a higher benchmark for the market size applicable than the Rs. 100 Crore mark.
- The findings are in agreement with the figure most published in the media stated by Denis Collart, the global head of PWC's CRM practice who, in an interview in November 2000, stated that the Indian Market for CRM Software and Services would grow to about Rs. 100 Crore by 2001.

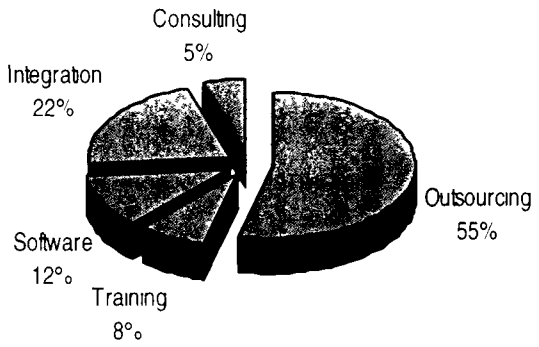
2.8.4 CRM Market Segments

Fig 2.2: CRM Market Segments



The market segments for CRM can be broadly out as the Software, Services, and Hardware market. The study has been restricted to the Software and Services markets.

Fig 2.3: Breakup of the Global CRM Market



This chart gives the breakup of the Global CRM Software and Services market. The projected revenues for each of the segments for the year 2001 from past research have been used to arrive at the relative percentages. This breakup is merely indicative, as the revenue projections have been taken from more than one source.

Observations and Inferences

- The breakup between revenues from various segments in the Indian context is not expected to vary from global market to a significant degree. With this assumption, the size of the market for CRM implementations (including Software, Integration, Consulting and Training) in India lies in the 40-60 Crores range.

- Given the small market, a local vendor looking for business is going to find himself up against tough competition. Majority of the CRM solution providers in India do not have a product but act as consultants and integrators for software like Siebel, Oracle, SAP etc. providing consulting, software deployment and integration, and training.
- Outsourced CRM Services has the maximum potential for growth, but the number of players entering this market is growing at a significant rate. Telemarketing Firms, Direct Marketing Firms, Data Collection firms, Market Research firms, and even Advertising Agencies have begun to add the CRM tag to their services. With the Call Center market finding the international market tough going, they are increasingly turning to the domestic market to supplement revenues.

2.8.5 Market Prospects

• Indian firms are aware of CRM, but are yet to take concrete steps towards implementation.

•The market is expected to catch on, but slower than anticipated.

•The overall sentiment is 'wait-and-watch'

The next two charts indicate what respondents feel is the stage of evolution of the Indian CRM market and what they feel are the market prospects.

Fig 2.4: Stage of evolution of the Indian Market

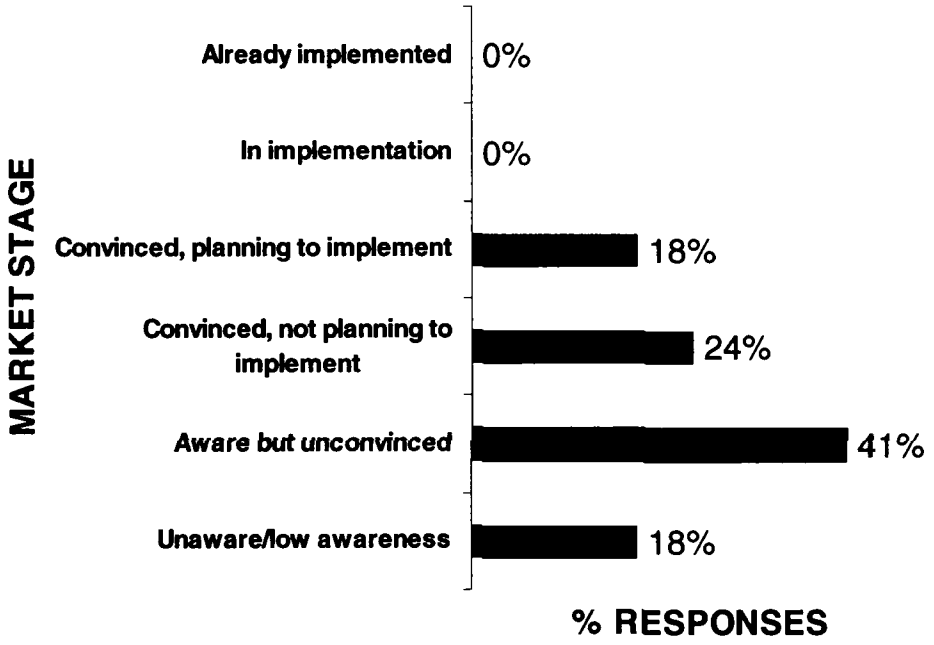
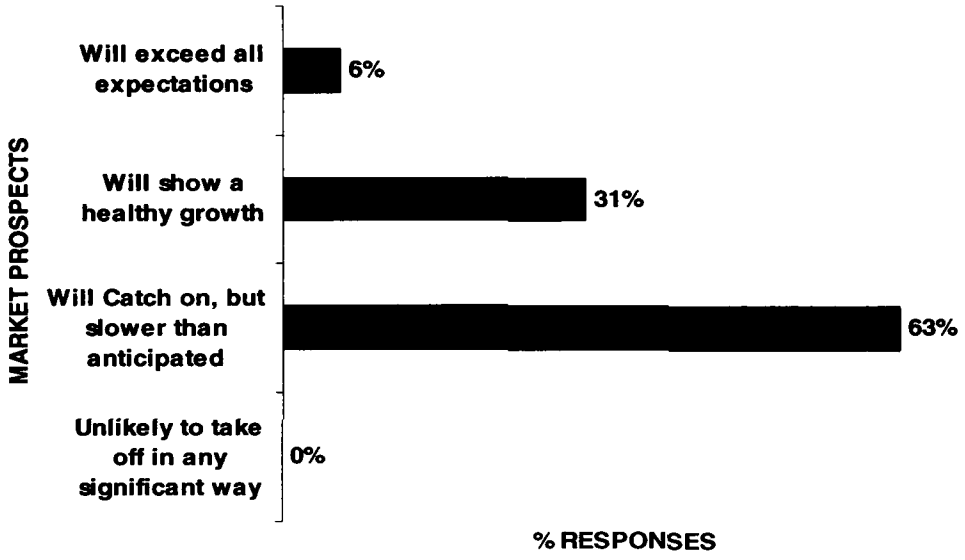


Fig 2.5: CRM Market Prospects



Observations and Inferences

- While there has been a great deal of attention on CRM technology and practices in recent times, when it comes to putting it in practice, the market is in a very early stage of evolution. Most respondents felt that the Indian firms were either unaware, or unconvinced about the benefits and applicability of CRM.
- The overall sentiment when it comes to growth prospects is upbeat in the sense that people are convinced that it shall take off, albeit slower than anticipated. Signals for Solution and Service providers are that they are going to have to stick through this early stage till the market matures in terms of awareness and acceptance, and the number of implementations increases.
- Media reports have put the annual growth rate for the CRM Software market in India at 25-30%, and Services market at about 50-60%. Here respondents however feel the going shall be slower than projected.

2.8.6 Market Drivers and Inhibitors

- The need for improved customer service and high global adoption shall drive the Indian CRM market
- The high cost of implementation and low awareness of benefits is going to prove a major deterrent

The next two charts indicate the factors that respondents feel will drive acceptance of CRM in India, and the factors that will hold back acceptance.

Observations and Inferences

- A need for improved Customer Service shall be the main driver for Industry sectors that depend on the quality of their customer interactions to retain existing customers and win new ones. High Global adoption is

likely to drive the MNCs to adopt CRM first in line with Global implementations.

Fig 2.6: Market Drivers

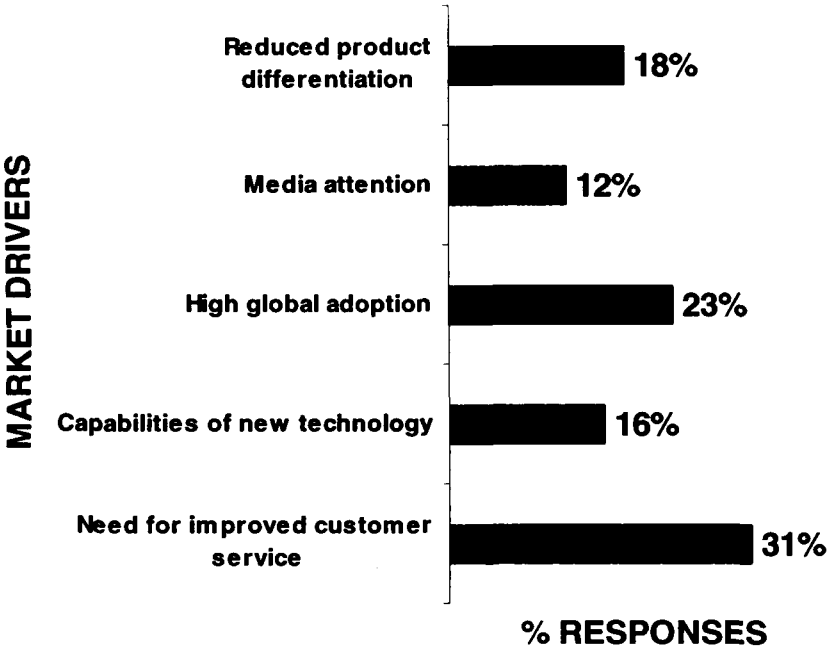
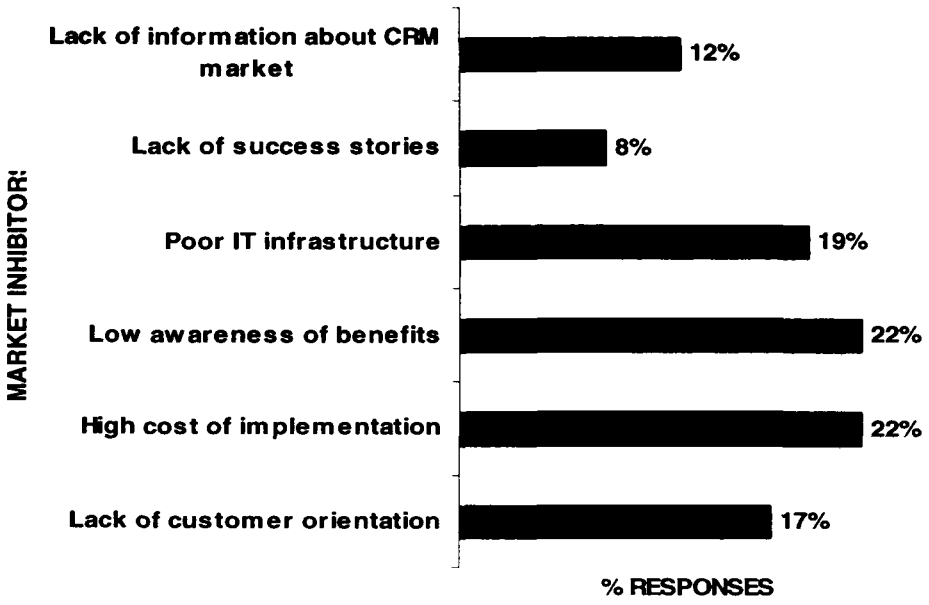


Fig 2.7: Market Inhibitors



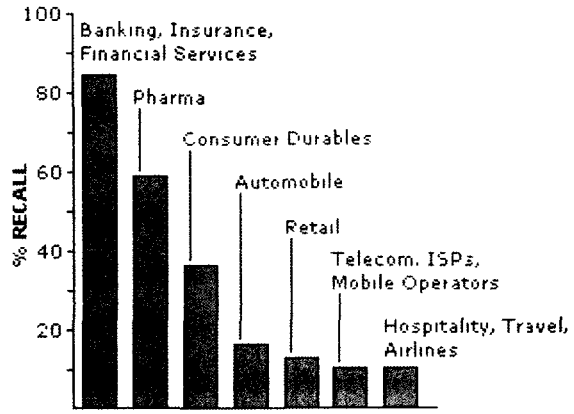
- While the first hurdle holding back the market is a lack of awareness, respondents have put high cost of implementation as the main inhibitor. Complete and comprehensive CRM packages such as those of Siebel and Oracle costing in the range of Rs. 1 to 2.5 Crores (and more) are too expensive for most Indian firms. However, with software vendors bringing down prices and offering relatively affordable packages bundled with integration and consulting services, this could soon change.
- In the Indian context, lack of customer orientation and poor existing IT infrastructure can prove major factors. Firms need to evolve their customer thinking by a significant extent before they accept CRM as the strategic imperative it is, and internal systems and database management practices need to be upgraded before CRM software can be used to any effect.
- Another major inhibitor indicated by respondents was that Indian firms lack the skills and strategic vision required to successfully implement CRM.

2.8.7 Buyer Sectors and Vendor Recall

• Banking, Insurance, and Financial Services are the sectors that shall benefit most from CRM practices and technology.

• Siebel emerges as the most top-of-mind CRM package, followed by Oracle and Talisma

Fig 2.8: Best-fit sectors for CRM practices and packages



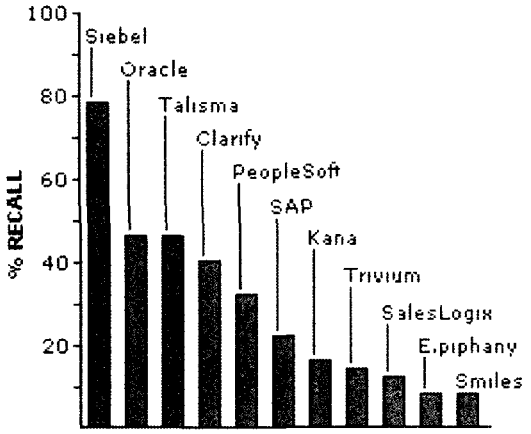


Fig 2.9: Top-of-mind CRM Packages

Observations and Inferences

- Our respondents voted overwhelmingly in favor of the Financial Services sector as the best fit sector for CRM. Recent implementations in the banking and financial services sector, especially those of ICICI and Citibank, have clearly grabbed attention.

- The best-fit sectors as expressed by our respondents gives an indication as to how closely CRM is associated with improvement in customer service.

- Siebel is the global leader when it comes to CRM software and has clearly grabbed mindshare in the Indian market as well. While 77% of the respondents mentioned Siebel as a known CRM vendor, Siebel was the first CRM package that came to mind for 64% of the respondents.

- SAP and Oracle have recently entered the Indian market with aggressive plans targeting the SME market in particular. Both firms are targeting a growth in the market for their products of about 30%.

2.8.7 Respondent Profile

Fig 2.10: Respondent Profile

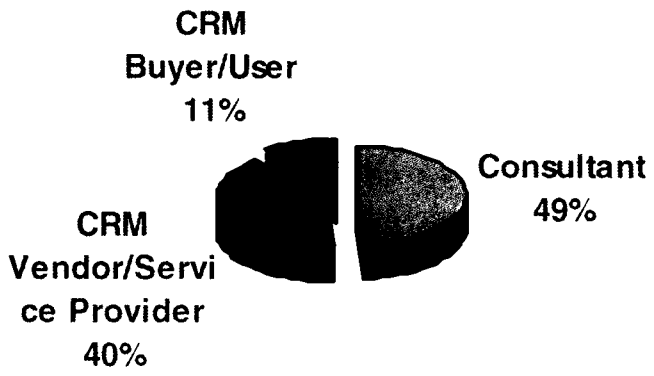
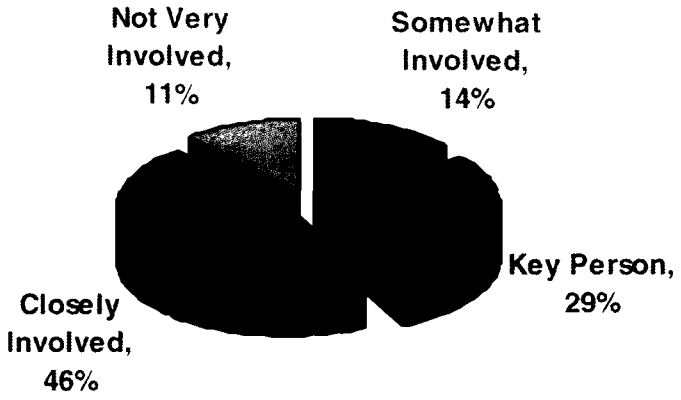


Fig 2.11: Respondent Involvement with CRM



Total respondents: 71
(The above has been adapted from Mittal, Sharma and Wicliff 2001).

2.9 Customer Relationship Management – High Tech?

The truth is that Customer Relationship Management (CRM) is not about technology as CRM Guru's David Sims 2001 said, "hospitality is about throwing a welcome mat on your front porch." The truth is that CRM requires a customer-focused culture, not slogans in the annual report. If company leaders don't "get it," forget it. Technology is one of the means to the CRM end.

With newer players making a beeline to enter, the customer expectations are intensifying towards pricing, information, service promotion, obligation & disclosure, honesty & integrity, helping attitude, needs assessment and satisfying needs. People are demanding ethical service over and above the other things with latest foolproof and reliable technologies. Healthcare sector is redefining and

remodeling its goals and objectives to become more customer centric. The sector players are therefore employing customer relationship strategies to take the maximum market shares. The customer focus does not entirely come from the strategies but from within. The truth is that no matter how easy the software is to install, no vendor, integrator, or consultant can sell CRM. Everyone has some version of CRM, even though it might stink and you can't smell it. Great CRM means listening to customers and taking action (Sims 2001). Hence CRM is not to be imagined as a software program or even a technology for that matter since it is more of a common sense management than any gizmos and jargons.

In its orientation this sector however focuses its resources and attention on building efficient infrastructure and systems, rather than understanding and forging relationships with various customer segments.

2.10 What business are you in?

Theodore Levitt pointed out in "Marketing Myopia," his classic *Harvard Business Review* article published in 1960, the presidents of American railway companies in the early 1900s, if asked, would have answered the question "What business are you in?"

> "We are in the business of operating trains."

The result of this narrow, product-oriented thinking was that virtually every U.S. rail company went bankrupt or faced serious problems because they missed out on the rapid growth of the airlines and the development of a sophisticated highway system as a way to get things and people from place A to Place B.

The answer instead should be "We are in the transportation business." For IBM it has evolved from "biz of supplying punch card machinery" to "the biz of data

processing" and could more rightly have been "the biz of making customers, keeping customers, and maximizing customer profitability" (Curry 2000 3-4).

From the Pharmacies' previous mission definition "delivering drugs and accessories" the concept had become "health and well-being in a broader sense". With this new focus in mind pharmacies took the opportunity of maintaining a strong position in the healthcare system while at the same time gaining access to the new fast growing market for holistic remedies and quality of life.

The range of products were extended to include health and diet products, herbal or oriental medicines, skin products and cosmetics. Pharmacies began collaborating with suppliers in areas such as Quality assurance and product declaration (Hougaard and Bjerre 2004 329).

2.11 Customer Relationships

Customer relationship is the driving force of the new business model, and the customer – the patient – is its main benefactor.

The Internet has brought about an irreversible change to the doctor-patient relationship. Several US and Europe surveys of the last two years show that more than three-quarters of respondents agree with the statement that people should undertake responsibility for their health and not rely on doctors to such a great extent. With this transfer of responsibility comes a thirst for knowledge. Consumers' demand for information is fuelling the explosion in health-related websites.

Patient pressure for access to information – data banks, law and regulation, expensive new treatments – is driving changes in the healthcare sector. New professional organizations in healthcare are using the Internet and related

technologies increasingly to provide this information and new services, leading to greater transparency, efficiency and quality in the health sector. R&D, production, sales, marketing, and customer relationship management will be transformed by new E-Business models. Today, the traditional players are not innovating quickly enough, and the new E-Start-ups are filling the gap between them and the customer. To keep on track with the new players and business models, traditional players must evaluate E-Solutions quickly, focusing on building customer relationship.

It is evident that E-Business is not just about passive information gathering. Medical and pharmaceutical research will be facilitated and time-to-market improved using E-Business research and knowledge solutions. New services and sites offering greater interactivity and personalised advice will continue to emerge. The new services will be delivered by healthcare E-Start-up companies with a strong customer relation approach. They are going to change the distribution of pharmaceuticals, medical supplies and diagnostics into a direct-to-consumer business, threatening traditional pharmaceuticals and other healthcare industries, and traditional healthcare service providers, including physicians (Brucksch 2000).

Marketing is not only to plan and implement a given set of means of competition in a marketing mix, but to establish, develop and commercialize customer relations, so that individual and organizational objectives are met. The customer relation concept is the core of marketing thought. Promises of various kinds are mutually exchanged and kept in relation between the buyer and and seller, so that the customer relation may be established, strengthened and developed and commercialized (Ozuem 2004 53).

The five objectives in the customer perspective are: time saving, aggregate value by B2C (Business to Consumer), customer relations, price and physicians' satisfaction (Pour 2001).

Healthcare has been slower than some other industries to adopt the concepts of customer service and quality improvement. One of the roots of medical malpractice suits is dissatisfaction with the quality of care that was rendered. The protective halo over the healthcare professional's head can be tarnished by predisposing and precipitating factors for lawsuits (Abele 2004 45).

Select people who exemplify the spirit and skills of excellent customer relations towards patients, doctors, visitors and coworkers.

Caution and care in selecting workshop leaders pay off in your employees' acceptance of the customer relations message.

However you staff for customer relations excellence, you need involvement from a wide range of people who become stakeholders, and these people have to be the right people. In her presentation to the American Society of Healthcare Education and Training in June 1985, Katie Buckley of the Einstein Consulting Group specified *nine musts* for all the people who staff your customer relations function in any way, from full-time staff to committee and subcommittee members. The most important two being:

- Act the expert and educate others
- Establish a vision and let it lead you and hang to it through thick and thin.

(Leebov 2003 268)

What is apparent today is that "disaster" has a very broad meaning. No longer is disaster solely associated with headline events such as hurricanes, earthquakes, tornadoes, or floods. Indeed even brief interruptions to information systems can mean the inability to deliver products and services to the customer, which then impacts revenue, productivity, and customer relations. No longer does it take the worst-case scenario to adversely impact a company's business processes or bottom line (Beaver 2002 94).

Through image processing, workers can have faster access to documents and other information on file. Image processing also eliminates the need for document refilling because once a document is filed in an image processing system, it remains in place. This in turn significantly reduces time lost searching for misfiled documents.

Imaging potentially reduces the length of time it takes to provide information to organizational customers. Faster customer responses provide better customer relations and possible increases to business (Beaver 2002 482).

To assist staff in making immediate amends for actions that caused patient dissatisfaction, the complaint the department developed a tool called "DominiScrip," a pad of $5 scrip available to any hospital staff. Each department developed criteria and reasons to use the scrip to deal with customer dissatisfaction with service in a particular department. A recent customer survey and focus group results indicate that the DominiScrip program is highly successful (Boland 1996 339).

The elevation of sales person's role in the business to that of a revenue producer has a major impact on the culture of the Customer service organization itself, too. Top-line Customer service organization staffers do not spend all their time trying to make unhappy customers a little less unhappy—a thankless activity that leads to high burnout and turnover.

Instead, they can achieve "hero" status similar to their peers in marketing and sales. Higher morale and motivation in the Customer service organization raises the quality of the customer's experience even further. This cultural transformation is an added bonus on top of the additional revenue and strengthened customer relationships that top-line Customer service organizations deliver.
It is important to note that while government agencies and non-profit organizations do not share this focus on revenue development, they can still

benefit significantly from the implementation of top-line service practices. After all, they are also charged with ensuring that their services and resources are fully utilized by their constituencies—and they also seek to optimize the depth of their relationships with the "customers" they serve. Top-line service empowers such agencies and organizations to more effectively promote connected constituencies and resources, while keeping operational costs low.

It's hard to get somewhere—or lead others in the right direction—if you do not know your destination. To create top-line service, managers need to fully comprehend the potential role their Customer service organizations can play in generating revenue and optimizing customer relationships. They must have a strong sense of how customer interaction histories can be leveraged to discover revenue opportunities. They also need a clear understanding of how to build and equip a top-line Customer service organization (Gianforte 2003 6-7).
Customer relationships can take the form of prejudice too. At a formal corporate level, for example, the typical healthcare organization has policies, codes, and procedures designed to prohibit "political" behavior such as preferential treatment and favoritism in customer relations as well as employment practices. But, informally, subtle counter pressures can often arise. When, for example, a corporate benefactor needs a corporate favor, ways are sometimes found to bend or waive standards and procedures so that such political interests can be accommodated. When a physician who is key to generating hospital admissions favors certain corporate directions, he or she may well exert considerable political pressure. The term "office politics" is reflective of this reality. When it comes to analysis of management mistakes, it does matter when people with whom I dine and play golf are involved in my management decisions and actions. Formally, of course, my political party affiliation and personal ideology should not affect my decisions (Hofmann 2004 34).

Physicians are leaving their chosen profession in record numbers to get out of the mainstream of patient care and to assume academic or administrative

positions. The profession has never been high on customer relations circuit to begin with and now the respect for physician has plummeted. Add to that the attitudes of their nurses, and you have a very volatile, hostile environment in which to attempt to get well (Lehman 2001 186).

A fine example of the dangers of marketing in the healthcare arena is the prescription of antibiotics in the United States. Researchers at the Centers of Disease Control and Prevention (CDC) estimate that as many as a third of approximately 150 million courses of antibiotic treatment each year may be unnecessary. Doctors write roughly a million antibiotic prescriptions a year for *viral* infections, knowing full well that not only are antibiotics ineffective against viral infections, but also that such indiscriminate use of antibiotics can lower both the individual's and the broader community's resistance to bacteria-based

infections. It is difficult to say what was in the minds of all of those doctors, but it appears likely that a large percentage of those prescriptions were written to keep patients happy. While that may be good for customer relations, it is a direct violation of doctors' Hippocratic oath-to do no harm (Ewing 2001 17).

Large organizations routinely collect vast amounts of personal information about their customers through the transactions they conduct. Organizations such as financial institutions, healthcare providers, travel agencies, retailers, automotive manufacturers, and communication companies, among others, collect this data to use in a variety of ways and for several reasons:

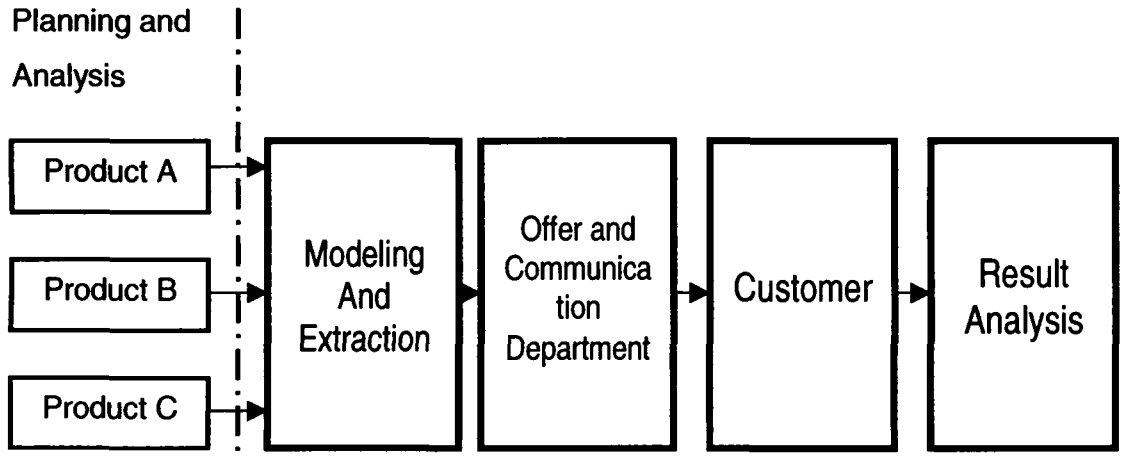
- To do targeted marketing based on individual preferences
- To analyze customers for profitability
- To evaluate their own service levels (Duane 2002 16)

Managing customer relationships successfully in large customer environments; like financial, retail, travel, healthcare, communications, entertainment,

automotive, etc.; means learning about their habits and needs, anticipating future buying patterns, and finding new marketing opportunities that add value to the relationship. It also means using technologies that enable all of the data gathered to be used as an aid in making business decisions that will attract, retain, or motivate customers.

Successful companies make their customer relationships something the customer values more than anything else they could receive from the competition. This companies do by examining their experiences with customers, including transactions and demographics, and every form of interaction – including a Web site visit, a phone call to a call center, and a response from a direct mail campaign. Building the data and information technology architecture around customers – a customer-centric approach – ensures that they enjoy a seamless and rewarding experience when doing business with a company. This is a new marketing paradigm, placing the customer at the focal point of an organization's marketing programs (Duane 2002 19).

Fig 2.12: Customer-Focused Marketing



Source: Duane 2002 20

How do you create customer preference? Much has been said about the importance of customer relationships in driving revenue, and about the fact that repeat customers are also the most profitable customers.

But what does .relationship. mean from the customer's perspective?

Accurate contact information?

A consistent record of the customer's last transaction?

These are important aspects of the business relationship, but they're probably only part of what customers consider in terms of their relationship with you.

Fig 2.13: Critical Customer Relation Success Factors

Critical Success Factor	Key Strategies
Customer Relations	◘ Go the extra Mile. ◘ Listen. ◘ Try to handle any problems-on the spot. ◘ Display confidence and interest. ◘ If someone complains, do not place blame; absorb the blame and make it right. ◘ Be positive in all interactions; never argue. ◘ Give people options; allow them to retain control.

Courtesy of Friendly Hills HealthCare Network

Source: Shelton 2000 268

Customers want to be able to place orders quickly and easily. They want accurate information on when their order will arrive, or when the parts will be in to

repair their equipment. They want you to know what they usually order, and to provide suggestions if their first choice isn't immediately available. They don't want to wait while you look up pricing information or product specifications (Peoplesoft 2003 4).

The key strategies to the critical success factors enable us in looking at the enterprise from a holistic approach to change the whole thing on a 360 degrees basis to achieve the desired outcomes. Business Process Reengineering helps the organization look at the validity of the processes themselves, take them apart, and rebuild from the standpoint of customer requirements-whether those requirements were to reduce cost, ease information gathering, or streamline billing procedures. To delay reengineering would ultimately prevent the Healthcare Company from achieving its strategic goals of enrollment growth and rate competitiveness (Boland 1996 156).

Posters

The great thing about posters is that they aren't too expensive and they dress up the environment while communicating to everyone that your priority is service excellence and customer relations. The figure below shows a poster developed for HOSPITALity Program at Albert Einstein Healthcare Foundation.

These posters primarily make the hospital and staff thereof, as also the stakeholders, share their beliefs and concerns for the patients with the customers. The call to the staff instills confidence in the mind of the customers about the management's seriousness inb being customer spirit in all its true sense. The poster is very much like our own *Gandhiji's Talisma quote.*

Fig 2.14: Poster Used as Reminder of Customer Relations Priority

You Are This Medical Center

You are what people see when they arrive here.

Yours are the eyes they look into when they're frightened and lonely.
Yours are the voices people hear when they ride the elevators and when they try to sleep and when they try to forget their problems.

You are what they hear on their way to appointments that could affect their destinies and what they hear after they leave those appointments.
Yours are the comments people hear when I think they can't.
Yours is the intelligence and caring that people hope they'll find here.

If you're noisy, so is the medical center. If you're rude, so is the medical center.
And if you're wonderful – so is the medical center.
No visitors, no patients can ever know the real you, the you that you know is there — unless you let them see it. All they can know is what they see and hear and experience.
And so I have a stake in your attitude and in the collective attitudes of everyone who works at the Albert Einstein Medical Center.

We are judged by your performance. It is judged by the care you give, the attention you pay and the courtesies you extend.

Thank you for all you are doing.

Developed from: "You are this Medical Center," Albert Einstein Healthcare Foundation, Philadelphia, PA 1994; Service Quality Improvement: The Customer Satisfaction Strategy for Health Care By Wendy Leebov, Ed.D. and Gail Scott, M.A. Adapted from Leebov 2003 226.

Point of entry marketing:

Whatever be the number of hospitals in your system, in each hospital, you pick twenty key referring primary care offices, and begin a cooperative advertising program. That's 300 to 900 offices (for 15 to 45 Hospitals)! With a matching advertising budget split between the offices and your hospital, you're now talking about the kind of advertising campaign that many franchise companies take years to build. You can do it in one year, if you get your doctors working with you, if you get your customer relations training programs started first, and if you pick (or license) the right trademark (Winston 1985 72).

Importance of Customer Relationship in Healthcare Sector: Healthcare — An Immensely Complex Maze of Multi-Level, Often Interrelated Transactions - An American Commentary

Our American healthcare system is a unique, and some would say, a uniquely dysfunctional business model. Some have referred to our system of healthcare as "Multiple Personality Disorder." Although even a cursory examination can be confusing and somewhat mind boggling, consider the following:

In any "conventional" business model, a mutually agreeable exchange of goods or services for remuneration is quite simple. A "customer" determines the goods or services they need or desire, and then a supplier provides those goods or services. The customer pays, and the transaction is complete. Try to relate this simple transaction to healthcare:

First, we should try to identify the customer. The customer is typically the person making the buying decision and paying for the goods or services. Not necessarily in healthcare, however. The decision of what goods and services a patient receives could be made by:

- physician
- specialist

- hospital
- insurance company or health plan
- an employer
- the government
- some combination of all of the above
- and on rare occasion, with input from the patient

In fairness, it should also be pointed out that outside influences often determine the "course of care" for patients. The potential for litigation may prompt doctors to practice defensive medicine by ordering additional testing. Sadly, profit opportunities may also influence the course of care. Additionally, local accessibility to tests and therapy may also influence the selection of diagnostics and therapies. The choice of medication may be influenced by sales relationships between pharmaceutical companies and doctors. Even the choice of consumable products used by doctors and hospitals are often influenced by their participation in Group Purchasing Organization. Often doctors are forced to use products that are not their first choice, simply because a certain vendor has an exclusive relationship for the sale of supplies to that doctor or hospital.

In summary, in the business of healthcare, the person making the purchasing decision is not the person receiving the goods or services.

Who pays for the goods and services that the healthcare customer receives? The majority of money is not paid by the customer/patient. Insurance companies and health plans make the bulk of the payments, influenced, of course, by the people that are paying for the insurance and health plan.

In the case of Medicare and Medicaid, a labyrinth of rules and regulations dictate to doctors the types of acceptable tests and treatments in consideration of the diagnosis. This, by the way, could form the subject of another article. It might be a quite lengthy article, as the entire arena of Medicare and Medicaid is rife with

potential problems, abuse, waste, and a level of complexity of its own that is frankly, beyond most mere mortal's comprehension.

In our healthcare system, the customer/patient does not (for the most part) pay for the goods and service he/she receives. This is, so far, a schizophrenic transaction model, but it gets more complex.

In a typical business transaction, seller/provider and customer are pretty well defined. A customer makes a purchasing decision, pays, and a vendor delivers. In healthcare, we cannot clearly define the vendor.

Is the doctor the vendor? Perhaps, in a routine, simple office visit; but if medication, tests, therapy or hospitalization is involved, the transaction becomes more complex. Multiple vendors pop up and some of those vendors' relationships may not be clear, or even proper.

If a doctor sends a patient for tests, those tests are probably performed by a separate entity (separate bills). But that entity probably has a "referring" relationship with the physician. Almost never is a choice given to the patient. The doctor may prescribe medications, sometimes without choices being given to the patient.

If a physician sends a patient to a specialist or to the hospital, additional layers of complexity begin to multiply like rampant bacteria. Doctors routinely have a hospital or hospitals to which they refer their patients. Hospitals refer to these doctors as "referring physicians" and they court them strenuously, as these doctors become the hospital's main source of "new customers."

You may think that the hospital is a single entity, and that understanding the customer-vendor relationship is somewhat easier once you are inside these hallowed halls. This is increasingly becoming less prevalent. Hospitals often "outsource" many of their core services such as anesthesiology, laboratory, pharmacy, and more. Though these services may reside in the hospital building,

and may "look and feel" like they are part of the hospital, increasingly, they are not. They are separate entities that lease space in the hospital and charge the hospital for the services they provide. Do you have a choice? Perhaps, but try exercising that choice — you may find it difficult, if not impossible.

By the way, your doctor is likely a "referring" physician with the hospital... not an employee. And once admitted, some of the choices your doctor may wish to make for your care are influenced by the capabilities and relationships the hospital has.

Believe it or not, this is a highly simplified overview of the complexities of the vendor-customer relationship in healthcare. Each and every level of complexity mentioned in this overview is laden with additional, more arcane levels of complexity.

To summarize, healthcare in the United States has evolved into an immensely complex maze of multi-level, often interrelated transactions. Name one other business transaction where you, as the customer, have almost no control over the products and services you receive, and you are responsible for only a portion of the payment — yet your health, and perhaps your life, is in the balance. And the costs, even your small portion (if you are insured), are enormous.

Just for fun, try to apply the healthcare transaction model to another transaction that might be comparable in scale (at least in dollars)... a new home.

At work, your employer deducts a portion of your paycheck and adds some money to that, and pays into a "house fund" for you (analogous to your insurance company). When you decide you are ready to own a home, you contact your trusted home ownership advisor (analogous to your family doctor in this example). Your "home advisor" determines, without input from you, what size house you should have and where it should be located.

Your home advisor sends your "file" to a construction company of his choosing. The construction company then sub-contracts carpenters, plumbers, electricians, and others to build your house. Some are completely independent companies; some are potentially linked to the contractor, financially, or otherwise. The construction company sends some bills to your "house fund" and some to you. The sub-contractors also send bills to your "house fund" and to you. You are not involved in the decisions. In fact, you are not even aware of the costs until the bills arrive. You are not aware of the outcome, either, until the house is finished.

You may get a wonderful new home, at a fair price. You may not. Think about it (Healthcare website).

Amazing are the similarities in the Indian scenario too, may be this is applicable globally – on a sadistic note.

A Case Study

Doctor A and Hospital X: Should Try Harder In early June, my 15-year old son was diagnosed with a "mild" case of viral meningitis. We were cautioned to watch for certain symptoms, and if they appeared, we were to take him to the emergency department (ED) immediately. Those symptoms appeared, and my son was on his way to the ED at Hospital X.

Fortunately the tests came back negative; our son was apparently suffering from some flare-up of the virus. He was discharged. This story should end here on that somewhat happy note, but the experience with the hospital staff once again demonstrated that outcomes are not necessarily the measure of satisfaction.

Originally my son was seen in the ED by a very compassionate physician who moved my son's case to the top of the priority list. During the course of his tests, that physician's shift changed and his replacement was not only impersonal but invisible. Also, our pediatrician (Doctor A) never responded to the ED pages, and at discharge the nurse did not know, among other things, whether our son's

condition was communicable (it wasn't). We were given a prescription for pain management and some discharge instructions to read on our own.

To our surprise, the ED physician who had first treated our son called the next day to check on his condition. We were greatly buoyed by this act of concern and felt the worst was behind us. Doctor A never did call us.

As it turns out, the discharge instructions proved to be incomplete, omitting the all important requirement for complete bed rest in a dark room for at least 48 hours.

Three days later our son's symptoms reappeared with a demonic vengeance. Had we received the correct instructions, that painful episode could have been avoided. Had Doctor A called, we could have reviewed his activity after discharge. We found that in the end, we were taking care of ourselves rather than being taken care of. We had been given a choice of hospitals and now believe that we chose poorly.

And to keep our comparisons consistent, our value as a customer was about $4,000 for that six-hour visit.

The Point: Become Loyal to Your Customers

* Doctor A and Hospital X exemplify the theory of "word of mouth" advertising. My family's negative experience with that pediatrician and that hospital is now the topic of every social encounter I have, demonstrating once again that we communicate our bad experiences to nine other people.

One interesting follow-up point: We asked Doctor A, our pediatrician of 13 years, why he didn't respond to the ED page. He got pretty huffy and said that it came in on his day off and he didn't take pages on that day. "It was the hospital's fault. They knew I wasn't in and should have paged someone else."

The one element common to all these examples is that I derived satisfaction not from the organizations' core competencies but from the experience around them. I never mentioned the Marriott rooms, the United flights, the Hertz ears, or the

accuracy of the diagnosis at the hospital. As these companies search for revenue, Marriott and Hertz will see my loyalty increase. United Airlines and Hospital X will not - Arthur C. Sturm, Jr. (Findarticle website).

2.11.1Customer Marketing: "What's in It for Me?"

There are four key benefits that one or more aspects of Customer Marketing can deliver:

- **More revenues and profits** by virtue of increase in sales visits and hence the Sales Revenues.
- **Increased customer satisfaction** through better Service advice, complaint handling, Sales expertise, promise fulfillment, and sales contact frequency.
- **More employee motivation** through involvement in decision making, room for initiatives, team cooperation, and cooperation with other departments.
- **Marketing and sales accountability** by virtue of increased priority to customer profitability, customer satisfaction, and customer focus.
  (Curry 2000 77-80)

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Part III: Healthcare Sector

2.13 Indian Healthcare Sector

Healthcare sector is considered to have a complex structure; it is capital-intensive, but has a low Return of Investment (ROI) of about 15 to 20 per cent, in comparison with other sectors. Nonetheless, the country's unmet demand for healthcare facilities, increasing spending in private healthcare, growing population and economy, increase in life expectancy, lack of entry barriers and intellectual pool are fuelling the growth of the healthcare industry, attracting international investors.

Perhaps, what made the ball rolling was the CII-Mckinsey report (2002) on India's healthcare industry, opines Dr Bhaskar Shah, Director, Asian Heart Hospital (AHI), Mumbai. "The report made the world stand up and take notice of the immense opportunities that were lying unutilized in the Indian healthcare industry," he adds.
The report states that India would require 750,000 beds by 2012 and estimates that a fresh investment of US$25 billion is needed to establish quality health facilities in the next 8-10 years.

Since healthcare is dependent on the people served, India's huge population of a billion people represents a big opportunity. And it's the middle income group, which forms a large 250 million that the international groups are targeting, besides patients due to medical tourism. Estimates say that while the proportion of households in the low income group has declined significantly, middle and higher income-group has increased from 14 to 20 per cent. With the demand for healthcare far exceeding supply, the industry has transformed to a USD 23 billion industry, which is surging ahead with a growth rate of 13 per cent a year. While

the general belief is that private healthcare spending in India contribute to 60 per cent of the country's healthcare service, the World Development Report, 2004 Pg 33 says that "In India, even with the huge organization of public health facilities, the private sector accounts for 80 percent of outpatient treatments and almost 60 percent of inpatient treatments. It also states that the private sector spending on healthcare ranges between 75 to 84% with an average of 79% (World Development Report, 2004 Pg 32).

Besides, the unmet demand, labor comes cheap in India. Drawing an analogy with Singapore, Dr Shah elaborates, "While the salary of a front office person in an Indian hospital would be around Rs. 5000 and that of a senior manager would be around Rs. 50,000 for a month, it would Rs. 25,000 and Rs. 2 lakh respectively in Singapore. Similarly, if a full-time doctor earns Rs. 4 to 5 lakh monthly, a doctor in Singapore would pocket Rs. 15 to 20 lakh."

The healthcare industry will witness presence of more international groups in the future as only ten per cent of the market has been tapped so far, say analysts. Besides, allowing 100 per cent FDI subject to approval by the Foreign Investment Promotion Board under the Department of Industrial Policy and Promotion in the Ministry of Commerce and Industry is a sign of the market opening up for international investors, say experts.

For Singapore, the Indian government has gone a step ahead and inked the Comprehensive Economic Cooperation Agreement (CECA) in June, this year, paving the way for increased business and investment opportunities between the two countries for health sector. Under the CECA, Singapore companies receive the most favored nation (MFN) treatment for trade in health products and services as well as national treatment, which means they are treated on par with domestic companies; tariff concessions for exports originating from Singapore, including exports of pharmaceuticals and medical equipment. Most importantly, it allows easier access for investments, joint ventures and collaborations in the

health sector. And it's not just Indian market that the investors are gunning for. After the saturation of Singapore, the US and European healthcare markets, the investors are also eyeing Middle East, China, Vietnam, some African States and Thailand. However, India's bureaucracy and lack of disciplined workforce do peeve the international groups. "In India, one has to seek 80 to 100 licenses, while in the western world one does not have to procure more than 10," sighs an official of an international group (Express Healthcare Management Nov 2005).

The Indian healthcare industry seems to have come a full circle — moving from rural to urban areas and now back to small places, offering an unprecedented pace, scale and spectrum of services. The development, of course, was inevitable, given the geographical advantage, talent pool, enterprise level and growth potential in the country. Arguably, the decade gone by was a crucial differentiator in the healthcare scenario. Explains Dr Anupam Sibal, group director, medical services, Indraprastha Apollo Hospitals, New Delhi: "People in India had not been exposed to corporate hospitals, while their experience with the government ones had not been good. But the moment private operators like Escorts Heart Institute and the Apollo group branched out in small places, it made sense for the people to go for the services — given the scale of operation, expertise levels, infrastructure and spectrum of services offered." Economics plays a key role for a healthcare provider, having a hub and spoke model means lower investment, less running cost and maximum utilization of expensive equipment. For patients, it means less over-crowding at the tertiary level and better access with priority to critical areas. It also eliminates unnecessary expenditure by way of longer patient stay. This also relieves capacities at the hub through pre-screening and diagnoses at the spoke. While hubs are the large multi-specialty hospitals, the spokes could be a small facility with diagnostics, consultation and pharmacy, larger city centers, or small hospitals with 50 or 140 beds. Says Shivinder Mohan Singh, joint managing director, Fortis Healthcare: "Taking northern India as the focal point, Fortis plans to have four hubs in this

region and 12-15 spokes in next few years. They already have the best equipment and state-of-the-art machinery in both Mohali and Noida."

Private participation is also helping bridge the wide inter-regional disparities on the health front. Already, the sector has innovated with healthcare delivery, such as telemedicine that delivers specialized advice to patients in remote locations using information communication technology. Most of the hospitals are connected by a strong IT backbone that allows doctors to access specialist consultants across the system and use the strengths of a large network to deliver on the promise of exceptional care. For instance, Dr Lal Pathlabs Pvt Ltd, which is the first laboratory in India to use the line Laboratory Information Management System (LIMS), allows a completely automated testing and reporting process. "This technology platform allows a link of outstation laboratories to the hub lab's main server 24x7x365," says Dr Arvind Lal, MD.

"The healthcare landscape in India has completely transformed because of a flurry of activity by private entrepreneurs. There have been many strategic tie-ups and consolidation in the industry. Gurgaon, for instance, is really seeing a lot of development. You could say these are the best days of healthcare in India," says Abhishek Bhartia, Director, Sitaram Bhartia Institute of Science & Research, New Delhi. In fact, the use of hub & spoke model has been a crucial differentiator among the factors helping private operators expand at a rapid pace. "Using the hub & spoke model, hospitals can penetrate the market in various cities, increase brand recall and service a large portion of the growing healthcare market," says Dr Sibal. Already, the Apollo group has opened 48 franchisee-based clinics at various locations in the country to tap this potential. It is also coming up with multi-specialty units at Noida, Ludhiana and Agra. For Fortis Healthcare Ltd, apart from its super-specialty facilities at Noida and Jassaram (Delhi), the heart institute and multi-specialty hospital at Mohali serves as a hub, while its facility in Amritsar serves as a spoke. With the acquisition of Escorts Heart, a leader in the fields of cardiac surgery, interventional cardiology and cardiac diagnostics, Fortis

has also become a cardiac hub in Delhi. With many more groups like Max Healthcare, Metro Heart Institute, and diagnostic set-ups such as Dr Lal Pathlabs, SRL Ranbaxy and Metropolis, expanding at a frantic pace, the Indian lead is becoming a reality (Economic Times March 12 2006).

Dubai-based real estate developer Emaar Properties has announced its plans to enter the healthcare sector in India, Middle East, North Africa and South Asia markets The plan includes the construction of hospitals, clinics and medical centers and provision of world-class healthcare services, an official statement said. Emaar will invest around $5 billion over the next 10 years in its healthcare business. It intends to develop and manage around 100 hospitals with 200-bed capacities, with super specialty care added in key centers. Emaar will provide the infrastructure and manage the administration and operations of its hospitals, clinics and medical centers. It will also form strategic partnerships with established healthcare institutions and providers in the region.

Emaar's target audience will be those currently looking westward for better healthcare services. "The detailed business plans for the healthcare business aims to meet the fast growing demand for healthcare infrastructure and services in the targeted markets," company chairman Emaar Mohamed Ali Alabbar said (Economic Times March 6 2006).

Apollo Tyres Ltd on Thursday announced its foray into the healthcare sector with an investment of Rs. 250 crore to set up a 500 bed hospital facility under the aegis of Artemis Health Sciences Ltd. AHSL would be a subsidiary of PTL Enterprises Ltd and the 500 bed hospital, a multi specialty facility, would be set up in Gurgaon, Apollo Tyres Chairman and managing director Onkar S Kanwar said. He said the company would be investing Rs. 250 crore for the entire project, of which the phase I would be completed in the next 18 months with an investment of around Rs 145 crore. This would entail setting up of an initial 212 beds, OPD facility, oncology centre and nine operation theatres.

The hospital would specialize in oncology, cardiothoracic and musculo-skeletal diseases (Economic Times February 23 2006).

The Indian healthcare industry suddenly looks like the gold diggers' paradise for international investors. Singapore-based Parkway Group Healthcare PTE Ltd, armed with the expertise of building eight hospitals internationally and enjoying an equal partnership for Apollo Gleneagles in Kolkata, is in the process of setting up hospitals in Mumbai and Chennai. Similarly, Malaysia-based Columbia Asia, which built its first hospital at Hebbal in Bangalore recently, has more hospitals in the pipeline. Singapore-based Pacific Healthcare Holdings is coming up with hospitals in Hyderabad, Chennai and Bangalore. Additionally, the buzz is that Singhealth from Singapore and Bumrungrad Hospital from Thailand are trying to secure a foothold in the Indian healthcare industry.

Exposure to international quality standards will imply that completely Indian-owned operations will have to benchmark their operations against the international groups. The international groups promise to usher in standards and a disciplined approach towards work, along with accountability to Indian healthcare industry. Quality Assurance and Customer Care, the foundation of a good hospital, will get a boost because of the international presence in the healthcare market, opines Dr Bhaskar Shah, Director, Asian Heart Hospital (AHI), Mumbai.

Avers Vishal Bali, VP, Wockhardt Hospitals Group, Bangalore and member of CII's healthcare group, "This is a welcome trend, which will professionalise the Indian healthcare sector. This is a step towards globalising healthcare, making Indian healthcare industry in sync with international standards."

According to Anne Marie Moncure, MD, Apollo Indrapastha Hospital, New Delhi, "Competition makes everybody better. There will be a marked improvement in customer services. As the world looks at India, the trend will reverse brain drain." For Dr P Mohandas, MD, MIOT Hospitals, Chennai, "Such projects create more

job opportunities. It is a win-win situation for both the international groups and Indian populace."

Medical tourism will inevitably receive a fillip. It is said that seven years from now, the country will earn Rs 10,000 crore due to medical tourism. It is estimated that the country is currently earning Rs 1500 crore with an annual influx of 1, 50,000 medical tourists. The ambitious Bengal Health City is slated to attract more medical tourists from Bangladesh, Burma, Bhutan, Vietnam, Nepal, Philippines and Cambodia."

To promote medical tourism in the State of West Bengal, a special cell has been constituted with representatives from the Department of Health & Family Welfare, AHEI, hotel association, association of tour operators and travel agents. Says Rupak Barua, Senior Office-Bearer of AHEI and Vice President (Marketing and Administration), Peerless Hospital and & BK Roy Research Centre, Kolkata, "While the hospitals hope to generate more income, the state could earn the much-valued foreign exchange through this exercise."

Apart from medical tourism and job opportunities, associated industries of medical equipment, pharma, health insurance and support services of security, laundry and catering will witness a major boom, predicts Dr Mitul Thakker, Senior Manager, Marketing, AHI. The international groups are expected to encourage shorter hospital stays with emphasis on day surgeries. "This will bring down hospital acquired infection rates as well as reduce patient expense. Reduced hospital stays and reduced cost of surgeries will reduce the premium paid to insurance companies for healthcare," says Ghosh.

Dr R V Karanjekar, CEO, Dr D Y Patil Hospital and Research Centre, Navi Mumbai, feels that Indian doctors, considered to possess the best brains and skill-set in the world, will gain more international popularity, now. "With competition the cost of healthcare services may also plunge, but not immediately

as the the new hospitals have to accrue profit from the investment made," he adds.

However, apprehension prevails about the fate of the internationally-run Indian hospitals, if the chief (which will mostly be from its international office) wishes to go back to his country. "Once the foreigner at the helm wants to go back or move on to another land, it may be difficult to run processes of international standards in the Indian context, where most of us have the crab mentality," says an Indian expert. Moncure quells the fear saying, "It is the responsibility of a leader to develop a second line of leadership. So even if the leader leaves, the second-in- line should take charge and manage the show."

While the world is waking up to India's potential market, are Indian entrepreneurs lagging behind? Observes Dr Alok Roy, VP-Operations, Fortis, "It is sad that there are a few corporate hospitals in India with a pan-Indian presence. Most of the Indian corporate hospitals are catering to a niche audience in only a few urban areas." According to him, Fortis with over six hospitals in the North besides upcoming ones in Delhi, Gurgaon, Jaipur, and in the city in Punjab and Apollo Hospitals Group with international presence are the only two Indian groups that are leading the show in the corporate healthcare in the country. "With Escorts acquisition, Fortis' effort in strengthening itself in the healthcare sector continues," he quipped.

The Indian corporates are thus taking slow steps in testing the waters, as India does not have the system and processes in place and also lack in trained manpower. Major Corporates like the Tatas, Apollo Group, Fortis, Max, Reliance, Wockhardt and Piramal are making significant investments in setting up state-of - the-art private hospitals in cities like Mumbai, New Delhi, Chennai and Hyderabad. The Reliance group, which runs hospitals in Jamnagar and a trauma care unit near the Pune expressway at Lodhivali, has acquired the unfinished hospital conceptualised by late Dr Nitu Mandke.

While the international groups may make expand their empires, they will never take the lead, feel experts. Dr Vivek Desai, MD, Hosmac said, "The international group may only take about 10 to 15 per cent of the market. The boom will be driven by indigenous players."

So, while the international groups may lend much-needed standards and protocols, it is for the Indians to take it forward. Perhaps, a word of caution from Joshua might help: "Indians need to ensure that it does not commit the same mistakes that the US did with its health insurance. It should have rules and regulations in place, so that insurance industry does not hamper the growth of its healthcare market." (Express Healthcare Management Nov 2005).

Shortly after buying out the majority stake held by the Escorts group, Fortis Healthcare Ltd hopes to work in collaboration with Chief Surgeon and minority shareholder in Escorts Heart Institute and Research Centre (EHIRC), Dr Naresh Trehan, in developing Medicity, the proposed multi-crore healthcare project in Gurgaon. With Dr Trehan expressing his intention of retaining 10 per cent stake in EHIRC, Mr. Harpal Singh, Chairman of Fortis, said: "We are partners and going forward we would like to work in collaboration. Dr Trehan had clearly indicated that he believes in the new enterprise and would like to retain his stake in the company. The reason for acquiring the hospitals of the Escorts group was to consolidate our presence in the healthcare business."

Earlier, both Fortis Healthcare and Dr Trehan, in their individual capacity, had announced plans to set up large hospital complexes in the National Capital Region (NCR) with investments touching Rs 1,000 crore. Under the new management, there will not be any significant structural changes. "There could be marginal adjustments and over a period of time, we will share best practices too." Fortis has been increasing its presence in the Northern region.

Recently, it picked up the stake held by the Talwar group in Sunrise Medicare Ltd, a 50:50 joint venture promoted by the latter and Mr. Amit Burman of the Dabur group, which launched a designer birthing centre. The Talwar group is a car components manufacturer and Mercedes Benz dealer in North India. But since it wanted to focus on its auto business, it decided to disengage from the healthcare business. Meanwhile, competition in the hospital business in North India is taking place within the family. Fortis promoter Mr. Shivinder Singh is the nephew of Mr Analjit Singh, promoter of Max Healthcare. With the Escorts acquisition, Fortis will have over six hospitals in the North besides upcoming ones in Delhi, Gurgaon, Jaipur, and in a city in Punjab.
Max Healthcare, on the other hand, has four secondary care hospitals along with one large tertiary hospital in the NCR. Its expansion plans include a centre for neuroscience, a joint replacement hospital, and a facility for minor access gastrointestinal surgeries. Max has indicated that will concentrate on expanding in the NCR and adjoining areas (The Business Line September 30 2005).

All the major hospital groups such as Fortis Healthcare, Escorts Heart Institute and Apollo Hospitals are making huge investments in setting up super-specialty healthcare facilities in the country's first Medicity.

This healthcare facility in Gurgaon, Haryana is being set up on the lines of the Dubai Health City and is expected to be the largest facility in South Asia.

Speaking to *Business Line*, Mr. Harpal Singh, Chairman and Managing Director, Fortis Healthcare said, "We will be investing anything between Rs. 800 crore and Rs. 1,000 crore for setting up a world-class healthcare facility."

Fortis is planning to have two hospitals catering to the domestic and international patients. Fortis is also getting into backward linkage, with the Medicity project at Gurgaon, which includes medical, pharmacy, nursing and dental college in Gurgaon along with a research laboratory. The doctors and nurses these

colleges churn out will be absorbed in Fortis' new and existing facilities," he adds. Fortis will also set up a large facility for clinical research and pathology besides offering courses in technical areas and hospital management. "We are looking at getting into outsourcing of pathology in a big way and will have two labs, one in Mumbai and the other in Delhi," Mr. Singh added (The Business Line November 02 2004).

2.13.1 The International Entrants

2.13.1.1 Parkway Group Healthcare PTE Ltd

The group, with single-minded dedication to penetrate the Indian healthcare market is Singapore-based Parkway Group Healthcare PTE Ltd. Besides, holding 70 per cent of Singapore's healthcare market, through its chain of Gleneagles Hospital, Mt Elizabeth Hospital and East Shore Hospital, the Group holds the reins of Gleneagles Intan and Gleneagles Medical Centre in Malaysia along with Gleneagles JPMC Cardiac Centre in Brunei. The Group is known to have correct business acumen, having sold two of its hospitals in the past, when the profit margin started dipping.

Explaining why India is the Group's present focus, Joshua Goh, Vice President, International Operations, Parkway Healthcare Group PTE Ltd, Singapore, draws an analogy with China, which has a population of 1.2 billion and is the fastest growing economy. "In the mid 90s, we were pondering on establishing hospitals in China. After initial rounds of talks with the comrades, we developed cold feet when we found that the legal system of the country was not foolproof to cover all sorts of risks. We could not have afforded to take any risk with our investor's money being at stake."

The group's relationship with India goes back to mid 90's, when they were approached by the Duncan Group to set up a hospital in New Delhi. While the project did not materialize, Parkway Group was hooked onto India. The group came up with its first Indian project in November, 2003 through a JV with the Apollo Group to build the Apollo Gleneagles Hospital, a 325-bed multi-specialty hospital at a cost of USD 29 million.

From the east, the Group has now ventured westwards. They have already worked on a tie-up with AHI to take charge of their administrative processes. "We are trying to make AHI run by professional management," says he. He is vocal about his dislike about hospitals managed by medicos. "Doctors are good at making excellent clinical decision, which are to be made at the spur of the moment. They are rather autocratic in their behavior, otherwise. The approach of a professionally managed team is more participatory."

Parkway is also working on the details of entering into a JV with a corporate hospital to start a multi-specialty hospital in Mumbai soon. The initial stages of the super specialty hospital may start from the premises of the Mumbai hospital, before it flags off on its own. The Group is also looking for hospital projects in Chennai and other cities.

2.13.1.2 Pacific Healthcare Holdings

Singapore-based Pacific Healthcare Holdings is coming up with Pacific Medical Centre, an international medical centre at Jubilee Hills in Hyderabad in a JV with Vitae Healthcare Pvt Ltd, a company formed by a group of doctors, scientists, and other healthcare professionals.

According to an official of Pacific Healthcare Holdings, Singapore, the group chose Hyderabad as it is ranked as one of the top three destinations for investments in India. "Hyderabad is a dynamic city with strong

leadership. Contacts from NRI doctors within our group is also another factor," says he. In the pipeline are two more medical facilities. The Pacific Women's and Children's Hospital will be a 150-bed state of the art hospital specializing in fetal-maternal medicine, reproductive medicine, gynaecological oncology, neonatology and paediatrics. The Pacific Stem Cell Bank will provide both private and public cord blood stem cell storage facilities, which has clinical applications in the treatment of blood cancers and disorders. Asked about its other future investments, the official said, "We are continually looking for opportunities for strategic investments, alliances or JVs in new or existing markets to enhance our brand name and perceived value of our services." The other cities that the group is trying to foray are Chennai and Mumbai.

Established in 2001 in Singapore, Pacific Healthcare Holdings is one of Singapore's leading healthcare service providers formed by a group of doctors. The group provides a comprehensive range of services that includes general medical and dental care, specialist medical care, cosmetic medical and dental procedures, health profiling and diagnostic services.

2.13.1.3 Columbia Asia

Down south, a few months back, Malaysia-based Columbia Asia set up its first 75-bed hospital in Hebbal, Bangalore through the FDI route. Explaining why India was chosen, Tufan Ghosh, CEO, Columbia Asia, says, the group selects such developing markets like India to expand and operate where private healthcare is recognized by consumers and the government agencies as a necessary supplement to the public healthcare system. Moreover, where there is a presence of large and growing middle and upper middle-income groups and options for quality healthcare are relatively limited or under served, growing third party payer and health-insurance industry.

"Bangalore offers a cosmopolitan market with a number of people from all over the country, adequate purchasing power and a discerning population aware of international practices. The city has plenty of local talent in doctors, nurses and paramedical staff and pointed to an under- supply of quality community-based healthcare facilities here," elaborates Ghosh.

In the pipeline, the group has two more hospitals, once again in Bangalore: one 150-bed tertiary care facility in Yeshwantpura area and another 75-100 bed facility in south Bangalore. The group is also exploring markets in the southern and northern parts of the country.

2.13.1.4 SingHealth

SingHealth is the eastern cluster of public healthcare institutions in Singapore. It includes 3 Hospitals, 5 National Specialty Centres and a network of primary healthcare clinics.

Each year, SingHealth institutions attend to over 3 million patients. Their departments handle about 350,000 cases and perform over 170,000 surgeries annually, through a team of 12,000 dedicated and professional individuals. The turnover during 2004 was SG$ 41.315 million.

SingHealth aims to provide Medical Excellence and Genuine Care, inspired by the core shared values of Clinical Excellence, Commitment and Collaboration. The cluster provides affordable, quality healthcare that is accessible, integrated and comprehensive. As the trusted leader in healthcare with a wide spectrum of 36 specialties, they offer a wide array of medical treatment options to suit all walks of life.

Constantly evolving in order to stay at the leading edge of medicine, they benchmark against internationally recognized standards to ensure paving the way as pioneers of medical excellence.

The members of SingHealth cluster are:
Changi General Hospital
National Cancer Centre Singapore
KK Women's and Children's Hospital
National Dental Centre
Singapore General Hospital
National Heart Centre
Polyclinics SingHealth
National Neuroscience Institute
Singapore National Eye Centre
(http://www.singhealth.com.sg/AboutUs/CorporateProfile/)

2.13.1.5 Bumrungrad International

Bumrungrad International (BI) is a public company traded on the Stock Exchange of Thailand. The majority shareholders are Bangkok Bank PCL (Thailand's largest bank) and the Sophonpanich family, one of Thailand's most respected business families.

Opened 200-bed facility: September 17, 1980
Listed on the Stock Exchange of Thailand: 1989
Replacement facility commissioned: January 1, 1997
Joint Commission International Accreditation: February 2, 2002

Largest Private Hospital in Southeast Asia
12 stories plus basement parking
US Hospital (NFPA) Building/Fire Standards

One million square feet

Fully licensed medical heliport

Over 900,000 patients treated per year (outpatient and inpatient)

39% are international patients from over 150 different countries

US$ 150 million turnover in 2004

US-led international management team

Over 2,600 employees

Over 700 internationally trained/certified physicians and dentists

Over 700 nurses

554 Inpatient Beds

500 Medical/Surgical/OB/Pediatrics Units

26 Adult Intensive Care Units

14 Cardiac Care (CCU) Units

9 Pediatric Intensive Care Units

5 Level III Neonatal Intensive Care Units

57 Deluxe rooms, 21 VIP Suites and 2 royal suites

24-hour Emergency care including emergency cardiac catheterization

Ambulance & Mobile Critical Care Fleet

Hospital 2000 Information System

135 clinic examination suites

Capacity: 3,000 OPD patients per day

Outpatient Surgery Center

More than 30 specialized Outpatient Centers

Special Facilities

2 Cardiac Catheterization Laboratories

19 Operating Theaters

MRI, CT and Lithotripsy

Nuclear Medicine

PACS Radiology

2 Cardiac Operating Theaters

Interventional Radiology

Neonatal Critical Care Transport

Radiation Therapy (Linear Accelerator)

Vitallife Wellness Center

International Representative Offices

Dhaka, Bangladesh

Yangon, Myanmar

Katmandu, Nepal

Ho Chi Minh City, Vietnam

Phnom Penh, Cambodia

Male, Maldives

Eschende, The Netherlands

Sydney, Australia

Special International Services

International Patient Services Center: interpreters, international concierge service, embassy assistance, VIP airport transfers, e-mail correspondence, international insurance coordination and international medical coordinators.

Bumrungrad Hospitality Residence: 74 Fully serviced 2-room and studio apartments connected to the hospital. Bumrungrad Hospitality Suites: 51 fully serviced apartments with swimming pool and fitness facilities.

Bumrungrad International (BI) engages in international hospital management, consultancy services and outside investment.

Quality & Certification

The FIRST hospital in Asia and Thailand's only hospital to be accredited by the US-based Joint Commission on International Accreditation (JCIA).

The FIRST private hospital in Thailand to be awarded Hospital Accreditation based on US and Canadian Standard, and the FIRST hospital in Thailand to be re-accredited.

Social Responsibility

Established in 1990, the Bumrungrad International Foundation is dedicated to helping the underprivileged in Thailand obtain access to free healthcare services. For over 15 years, the Foundation has provided over 100,000 Thais with free medical services ranging from check-up programs to heart valve replacements for children. (http://www.bumrungrad.com/htm/eng/main.asp?Filename=about/fact.htm)

2.13.2 The Major Indian Corporate Hospitals

Major Indian corporate hospitals' profiles, overview have been taken from their respective websites and hence most of the account given below is in first person:

2.13.2.1 The Apollo Group

Apollo Hospitals Group is the acknowledged leader in bringing super specialty world-class healthcare to India.

It is presently the largest integrated healthcare company in Asia.

Patients	7.4 million
Total Number of Master Health Check-ups	315,000
Total Number of Employees	over 10000
Total Number of Surgeries	280,000 major + 500,000 minor
Heart Surgeries	48,000 - success rate of 98.5%

Neuro Surgeries	10,538
Total Number of Renal Transplants	over 5000
Total Number of Beds	4148
Owned Beds	2471
Managed Beds	1677
Total Number of Hospitals	45
Owned	13
Managed	22
Total Number of Clinics	10
Total Number of Projects	37
Owned	4
Managed	33
Total Number of Pharmacies	70
Hospitals	12
Clinic	04
Convenios (Indian Oil Outlets)	12
Stand Alone	42

With a large gap between the need and availability of hospital facilities, our focus is to increase the bed capacity by about 30% every year. Major thrust fields of activities of the group consist of Hospitals and Clinics, Hospital Consultancy, Information Technology including internet based technology, Telemedicine, Education and Training, Virtual Medical University, Home Healthcare and Pharmacy Retailing.

Healthcare Professionals: One of the unique strengths of the group is the large pool of highly qualified and experienced specialist consultants, supported by full time doctors in over 60 departments. This pool is assisted by a dedicated team of nurses, technicians, managerial and administrative professionals - all of whom are put through vigorous and structured training

in our own hospitals. The total strength of full time professionals and supporting staff in our own hospitals is over 10,000.

Apollo has successfully and effectively transformed a large number of establishments by coupling state-of-the-art infrastructure and technology with management control systems to deliver international quality patient care.

By usage of patient friendly protocols (customized to every specific facility), development of Information Technology through our own experience, Telemedicine and MIS, we ensure the delivery of highest standards of medical care in the hospitals managed by us.

It is because of these inherent strengths, Apollo has been able to replicate tertiary care facilities with a minimal gestation period. Apollo Hospitals, New Delhi amply demonstrates this strength. In the very first year of operations, Apollo Hospitals, New Delhi performed about 1500 open heart procedures (out of over 15,000 surgeries) with a success rate of 98.5%.

This probably qualifies to be the best performance by any healthcare institute in the world in it's first year of operations. Our ability to source and select international standard manpower, implement effective systems, train personnel scientifically and create functionally cohesive teams in new environments are strengths which few others could match.

First Multi Organ Transplant: The lists of medical successes bear testimony to our commitment to quality healthcare. A number of landmarks have been achieved including the successful performance of India's first multi organ transplant in 1997.

Treating Patients across the Globe: Apart from Indian patients we receive a large number of Pediatric cases for advance therapeutic procedures in Pediatric cardiology & cardiac surgery, Neurosurgery, Nephrology, Urology, Orthopedics and Oncology from Africa, Middle East, Pakistan, Bangladesh and Sri Lanka.

Corporate Information: Apollo Hospitals Enterprises Limited's turnover over the last 4 years has improved from US $ 13.22 mn. to US $ 55 mn., indicating a compounded annual growth rate of 42.81% p.a.
In spite of severe competition AHEL Operating Profit Margin (OPM) and Net Profit Margin (NPM) have been above the industry average and in the year 1999-2000, OPM and NPM worked out to 25.63% and 9.98 % respectively as against industry average of 20% and 4% respectively (http://www.apollohospitalgroup.com/the_apollo_group.htm).

2.13.2.2 The Fortis Group

Fortis Healthcare and SRL-Ranbaxy are healthcare companies, established by the promoters of Ranbaxy Laboratories, the largest Indian pharmaceutical company with over $1 billion in revenues and a product line in over a 100 countries with a ground presence in 44.

Fortis Healthcare Ltd.: Fortis has a vision to set up a network of world - class super specialty hospitals linked with a larger network of multi-specialty hospitals to provide high quality healthcare to the people of India, through a hub and spoke model.

Fortis hospitals are benchmarked to international standards and in the cardiac area are affiliated with the Partners Healthcare System of USA, one of the largest health delivery networks in the US, consisting of world renowned hospitals like the Massachusetts General Hospital, Brigham & Women's Hospital and the Dana Farber's Cancer Centre.

In line with its growth strategy and with the recent acquisition of the Escorts Healthcare System, Fortis has brought within its fold an additional set of 4 hospitals in the North of India (Escorts Hospital-Amritsar, New Delhi, Faridabad and Raipur) taking its total operational hospital strength

to 10 hospitals. With a bed capacity of over 1,600 beds the group has established itself as the leading healthcare provider in North India. The Fortis Group has progressive plans to change the healthcare delivery landscape in India by being the premier healthcare provider in the region driven by quality and most importantly "patient-centricity".

Under Execution: A Fortis Hospital at Shalimar Bagh in North West Delhi. It will be a 500 bed hospital with centres of excellence in Cardiac Sciences, Gastro-intestinal, Renal, Genito-Urinary diseases, Orthopaedics and Neurology.

- A 150-bed hospital in South Delhi - focused on providing high-end tertiary services in Cardiac Sciences, Diabetes and Renal Diseases.
- A 150-bed hospital as a premium multi-specialty facility with a strong focus on day care services located in Central/South Delhi.
- A 1,200-bed facility in Gurgaon, designed to treat international patients across a range of specialties making the region a hub for patients coming from other states or countries. This facility will also house research and development services and will actively engage in the promotion of India as a destination for the delivery of quality healthcare services to the world.
- A 500 bed facility in Gurgaon addressing the needs of domestic patients across a wide range of specialties at the secondary and tertiary levels. It will have an attached medical college providing the much needed impetus into Medical Education.
- Fortis is actively pursuing opportunities to enter all other major metropolitan cities of the country. Bangalore, Hyderabad and Mumbai are some of the cities that are actively being targeted for entry in the near future. Our vision is to take the Fortis Delivery model to other countries in the not too distant future.

SRL-Ranbaxy Limited: SRL was set up in 1997 and established India's First Central Clinical Reference Lab in Mumbai. It was established with the

objective of providing cost effective, diagnostically incisive, world-class medical laboratory services in India.

Today, SRL-Ranbaxy is South East Asia's largest Clinical Reference Laboratory, and has successfully conducted over 25 million tests for patients in India, South Asia and the UAE. It has recently commenced servicing a large private hospital group in the UK through outsourced pathology services. Samples are flown out from the UK and post testing in India, the results are electronically communicated over a USFDA compliant IT network.

In India, SRL-Ranbaxy has established a network comprising of one central clinical reference laboratory, 16 satellite laboratories and 500 collection centres. Through this network, it supports over 25,000 doctors, 650 hospitals and close to 1,000 smaller Pathology Labs in 350 towns, across the country.

With the use of over 95 technologies, including the latest cutting-edge inventions and processes, SRL-Ranbaxy offers complete range of over 3,000 clinical laboratory tests for the screening, diagnosis and monitoring of every conceivable disease or metabolic disorder.

Having successfully rendered services for Phase II and III Clinical Trials, there has been a constant demand for SRL to cover other components of the Drug Development process, primarily Phase I studies and Bioequivalence work, including Bioanalysis and Pharmacokinetic samples.

SRL Ranbaxy's commitment to quality assurance is endorsed by the fact that it is India's first CAP (College of American Pathologists) and NABL (National Accreditation Board for Testing and Calibration Laboratories) accredited laboratory and also follows ISO/IEC 17025 standards. The QA/QC and technical standard operating procedures and guidelines meet the benchmarks set by:

- NCCLS (National Committee for Clinical Laboratory Standards, USA)
- CLIA

- GCP and GLP
- WHO and CDC

SRL-Ranbaxy seeks to, not only, retain its dominant position in India but also to substantially expand its overseas operations

Healthcare: Fortis Healthcare is engaged in providing the latest in internationally recognised medical care to patients with a variety of ailments and medical conditions.

Our Network consists of Super Specialty Hospital Hubs that concentrate on one or more specialties. These hospitals are interconnected to a larger network of multi-specialty hospitals that ensures patient access to expert care for any specialty.

This unique network architecture provides expert care to our patients and a level of confidence in receiving the latest medicine has to offer (http://www.fortishealthcare.com/about_fortis/about_us/fortis_group.html).

2.13.2.3 Max Group

Founded in 1985, Max India Limited is a Public Limited company listed in the NSE and BSE with over 37,000 shareholders. Prominent shareholders are Mr. Analjit Singh & family and private equity firm Warburg Pincus, while the remaining shares are held by Institutional Investors and the Public. Max India Limited is a multi-business corporate, driven by the spirit of Enterprise, focused on Knowledge, People and Service oriented businesses of Healthcare and Life Insurance. Max also maintains interests in:

- Clinical Research (Neeman Medical International)
- Specialty Plastic Products businesses (Max Speciality Products)
- Healthcare Staffing (Max HealthStaff)
- Telecom services (Hutchison Max Telecom Ltd.)

Max New York Life Insurance, founded as a Joint Venture between Max India Limited and New York Life, a Fortune 100 company, is one of the leading private life insurers in India.

Max Healthcare, a subsidiary of Max India Limited is India's first provider of comprehensive, standardized, seamless, and integrated world-class healthcare services.

MAX healthcare is India's first truly integrated healthcare system, offering three levels of clinical service (Primary, Secondary, Tertiary) within one system.

We believe in the concept of total patient care and deliver care by combining medical and service excellence.
Max healthcare is committed to quality care that not only addresses the illness but also concentrates on the overall wellness of the patients.

Salient Features

A team of highly qualified and trained doctors, nurses and patient care personnel to provide the highest standards of care.

- Latest medical equipment and hospital information system.
- Medical collaboration with Singapore General Hospital in areas of medical practices, research and training.
- Over 400 leading doctors, 280 corporate clients and a patient base in excess of 1, 70,000.
- Clean and comfortable facilities at all locations.
- Ensuring availability of your records at the touch of a button at our facilities.
- 24 hour- Chemist, Ambulance, patient diagnostic and Emergency Services.
- Regular educational and health camps to help educate patients on various health issues, so that they make informed choices.
- Max Happy Family Plan- Annual Health Plans covering domiciliary medical needs.

- A complete preventive healthcare programme - MAX 360°.
- 24 Hour Emergency

Comprehensive Healthcare System

Max Healthcare model visualizes setting up of a world-class healthcare model offering the best medical assistance delivered seamlessly through state-of-the-art medical facilities at:

Primary level

Dr Max™ Clinics

Secondary level

Secondary Care Hospitals & Max Medcentre™ Nursing Home + Diagnostics

Tertiary level

Max Multi-Specialty Hospital

Dr Max™ Clinics: These are conveniently located neighborhood clinics. The services at Dr Max™ clinics are designed to support and supplement the service of regular family physicians.

Dr. Max Clinic is situated at GK-I (South Delhi). There are plans to launch several Dr. Max Clinics over the next two years.

Dr Max Clinics™ are also replicated as Dr Max™ Implants; these are dedicated primary care centers in institutions like factories, office buildings, schools, etc. They cater to the captive clientele offered by these locations. At present, Dr Max™ Implants are at EXL Services, Wipro Spectramind, National Highways Authority of India (NHAI), Japanese Embassy and India Habitat Centre.

Secondary Care Hospitals & Max Medcentre™ Nursing Home + Diagnostics: These are conveniently located facilities offering specialist consultations and a complete range of Diagnostics including:

- In-Patient Stay
- Maternity Services Surgery & Procedures including minimally invasive surgery (MIS)
- Doctor consultation in all specialties
- Preventive Health Programmes

- Chronic Care Programmes in Diabetes, Asthma, Arthritis and Hypertension
- Diagnostics
- Dentistry

These are situated at Pitampura (North Delhi), Panchsheel Park (South Delhi) and Noida.

Tertiary Care - Max Devki Devi Heart & Vascular Institute: This is Max Healthcare's state-of- the-art tertiary care Hospital at Saket, New Delhi (http://www.maxhealthcare.in/corporates/about_max.html).

2.13.2.4 Wockhardt

Wockhardt is amongst the leading pharmaceutical and biotechnology companies based out of India, with a market capitalization of $ 1.2 billion. With a strong Global footprint, today almost 60% of Wockhardt's turnover comes out of International markets, most of it from Europe and the US.

Wockhardt Hospitals Limited is a chain of specialty hospitals in India under the Wockhardt Group. With over a decade of experience since inception, Wockhardt Hospitals is committed to provide you with the best medical services in the country and is known for offering a comprehensive and world-class care. It has all the assets that make it the best, in-fact one of the foremost hospitals in the country.

As a hospital, all our efforts are dedicated and committed to the creation of patient value. At Wockhardt, we are convinced that a judicious blend of technology, clinical expertise and personalized care applied in the context of achieving patient satisfaction can make our pursuit of excellence in health care highly rewarding.

Wockhardt Hospitals, India, currently operates the Wockhardt Hospital & Heart Institute, Bangalore, Wockhardt Hospital & Kidney Institute, Kolkata and Wockhardt Hospitals, Mumbai. Since then, these hospitals have become centres of excellence in their respective fields, and draw patients not only from their cities, but also from surrounding states and even

neighbouring countries. Wockhardt Hospital is planning to set up additional five super-specialty hospitals in the next three years, of which three will be at Mumbai and one at Bangalore. All these will have modern and world-class facilities.

Wockhardt Hospital & Heart Institute Bangalore In 1989, Wockhardt Ltd. instituted a dedicated super-specialty cardiac hospital in the south Indian city of Bangalore, christened - Wockhardt Hospital & Heart Institute, with a focus to excel in the field of cardiology and cardiovascular surgery. Since inception, we have grown to become a renowned tertiary level heart centre providing cardiac care to patients of all age group including infants.

A long standing reputation, for cardiovascular excellence along with premier diagnostic and therapeutic capabilities, enable us to treat the most complex and high risk cardiac patients. This has resulted in our institution being recognized amongst the best heart hospitals in India and a treatment destination for cardiac patients from neighboring countries.
The number of cardiac surgeries, angioplasties and coronary angiograms performed each year and the commitment to provide highest quality of cardiac care with compassion and concern for each patient's well being has earned us the recognition of being a 'Centre of Excellence' in cardiac care.
The services include both invasive and non-invasive procedures along with all necessary diagnostic facilities. Wockhardt Hospital & Heart Institute is ranked amongst the very best heart Institutes in India and over the years has performed several thousand successful cardiac surgeries and over a thousand angioplasties. This centre is also tied-up with five major medical insurance companies and with some of the premier heart institutes of the world.

Wockhardt Hospital & Kidney Institute Kolkata The Kolkata centre has expanded in a big way with the creation of the Wockhardt Hospital &

Kidney Institute - a 70 bedded dedicated Urology super-specialty hospital specialized in handing personalized day-care health services in Urology, Gastro-Enterology and Ophthalmology.

Being one of its kind in Eastern India, the centre offers several comprehensive health check-up packages meeting various needs of individuals and corporates. It also focuses on invasive and non-invasive surgery including Lithothrypsy, Renal Transplantation, Open Renal and GI Surgery. Some of the facilities available are Lithotripsy, PCNL, URS/ URSLC and Laparoscopic Surgery among many more.

Wockhardt Hospitals Mumbai Wockhardt has associated with Harvard Medical International, USA, to bring you Wockhardt Hospitals, Mumbai. Wockhardt joined hands with the Government of Maharashtra to set up a 250 - bedded super-specialty hospital in Mumbai, with state-of-the-art surgical and medicare facilities. Wockhardt will hold 51 percent of the joint venture equity and the Government of Maharashtra with the funding assistance of the World Bank will hold 49 percent.

Wockhardt Hospitals, Mumbai, is equipped with five different super-specialty focused hospitals, to offer you a comprehensive and world-class care, all under one roof.

Wockhardt Heart Hospital This hospital vows to offer you the best of cardiac care, with an excellent clinical record of highly qualified and expert cardiac surgeons. It also has interventional cardiologists with an international collective experience of more than 10,000 cardiothoracic surgeries, 25,000 Angiograms and 8,000 Angioplasties. The hospital is equipped with Cardiothoracic OT, Cardiac Catheterisation Lab, well-equipped ICCU facility, all designed to meet the international standards.

Wockhardt Brain & Spine Hospital This hospital provides extensive medical and surgical care for patients with disorders of the brain, spinal cord and peripheral nervous system. The neurologists and neurosurgeons are backed by the most extensive neuro-diagnostic and imaging facilities including MRI and CT technology. Along with providing general diagnostic x-ray imaging, Wockhardt Brain and Spine Hospital offers you a magnitude of imaging services like EEG, EMG, Sensation 10 CT Scanner, Functional MRI with Spectroscopy, OPMI Multivision etc.

Wockhardt Bone & Joint Hospital This hospital specializes in all types of musculoskeletal problems ranging from trauma to minimal invasive arthoscopy. The hospital will have speciality clinics for trauma, arthritis, pain management and osteoporosis. The clinical team is also specialized in joint replacement surgery, ligament repair, knee & spine surgery, arthroscopy surgery, minimum access joint surgery, pediatric bone and joint surgeries and sports medicine.

Wockhardt Eye Hospital This hospital is poised to be the leading centre for ophthalmology in Mumbai. It has specialty clinics in cornea, glaucoma, vitreo-retina and retinovascular, uveitis, squint, orbital diseases and oculoplasty, cataract & intra-ocular surgery, diabetic retinopathy and neuro-ophthalmology. The latest treatments and technology available in the hospital are OCTIII, IOL Master, FF 450 Fundus Camera, Millenium Micro Surgical System, SP-2000P Non-Contact Specular Microscope, Corneal Topography and Y.A.G. Laser.

Wockhardt Minimal Access Surgery Hospital To minimize surgical trauma, pain and blood loss to the patients, the hospital is focusing more on the Minimal Access Surgery. Also known as keyhole or band-aid surgery, it has been used for several years as an alternative to traditional open-surgery. The hospital will provide excellent services in minimal

access surgery in the areas of neuro-surgery, abdomen, thoracic, bone & joint, pulmonary and ENT.

Milestones

- The 1st Hospital in India to perform Minimally Invasive Coronary Artery Bypass surgery.
- The 2nd Hospital in India to have a dedicated Department of Electrophysiology.
- The 1st Single specialty dedicated Heart Centre in South India.
- The 1st Corporate Hospitals to cross 1000 Open Heart surgeries in Karnataka and now having performed over 7800 Cardiac surgeries.
- The 1st Hospital to perform Intra-Coronary Stent Implantation, Mitral Valvuloplasty, Rotablator, Coil Closure for Ductus & Internal Carotid Angioplasty in Karnataka.
- The 1st Corporate Hospital to introduce Primary Angioplasty & Intra Coronary Ultrasound facilities in Karnataka.
- Pioneered Stone Management and Key Hole surgery in Eastern India and Bangladesh.
- The 1st Hospital in India to perform Vertebral Artery Angioplasty.
- The 1st Hospital in India to launch an Emergency Cardiacare services through "The Wockhardt Cardiac Line."
- The 1st Hospital in South Asia to be recognized by the American BlueCross BlueShield Association on their worldwide network of participating hospitals.

International Alliances

A trusted name in Healthcare, Wockhardt Hospitals treat patients from all over South Asia, South East Asia, the Middle East and Africa. A significant endorsement for Wockhardt Hospitals is its tie-up with many global health insurance giants. Wockhardt Hospitals

is the first recognized hospital in South Asia on the worldwide panel of BlueCross BlueShield, the largest provider of health insurance in USA.

The list of global tie-ups is:

- Blue Cross & Blue Shield Association, USA
- SOS International Inc. Singapore
- Global Emergency Services Inc. USA
- BUPA, UK
- MEDEX Inc. USA
- Global Medicine Management Inc. USA
- Assist America Inc. USA
- GESA Assistance, Singapore

Ethics Committee

The Wockhardt hospitals Ethics Committee comprises of a multidisciplinary group of individuals who oversee development of policy, training and monitoring of issues of ethical nature, which are applicable to the hospital. The broad functions of this committee are to:

Provide consultation concerning questions of an ethical nature to health care workers, administrators, patients, or their representatives.
Educate health care professionals, administrators, other hospital staff, and the community about ethical issues that arise in health care and ways to resolve ethical dilemmas.
Participate in the proactive development, review and revision of the ethical dimensions of institutional policies (clinical and organizational).

2.13.3 Private Sector Healthcare perception glimpse

The private sector is preferred in Andhra Pradesh, India:

A study of consumer and producer attitudes was conducted in six districts in the southern Indian state of Andhra Pradesh. The study included 72 in-depth interviews and 24 focus groups.

Exhibit 2.1: Study of consumer and producer attitudes

Private	Public
ATTITUDES OF DOCTORS	
"They speak well, inquire about our health." "Ask about everything from A to Z." "Look after everyone equally." "They take money . . . so give powerful medicine . . . treat better."	"Does not talk to me, does not bother (about my feelings or the details of my problems)." "Don't tell us what the problem is, first check, give us medicines and ask us to go." "They are supposed to give us Rs. 1000 and 15 kg of rice for family planning operations; they give us Rs. 500 and 10 kg rice and make us run around for the rest." "Anyhow they will get their money so they don't pay much attention."
CONVENIENCE	
"Treat us quickly. . . ." "We spend money but get cured Faster." "I know Mr. Reddy. He is a Government doctor but I go to him in the evening." "Can delay payment by 5–10 days. He is OK with that, he stays in the village itself."	"Do not attend to us immediately." "Have to stand in line for everything." "Doctor is there from 9 a.m. to 4 p.m.—when we need to go to work." "I have not been there, but seeing the surroundings . . . I don't feel like going."
COST	
"Recent expenses came to Rs. 500 for 3 days . . . had to shell out money immediately." "We have to be prepared to pay; you never know how much it is going to cost you."	"While coming out, compounders ask us for 10–20 Rs." "Anyhow, we have to buy medicines from outside."
ADVANTAGES	
"Even if I have to take a loan I will go to private place, they treat well."	"Malaria treatment—they come, examine blood, give tablets." "For family planning operations." "Polio drops." "In case I do not get cured in private hospital, but it is very rare.
Source: Probe Qualitative Research Team (2002).cf (World Development Report, 2004 Pg 68).	

2.14 Marketing Healthcare

Corporate healthcare delivery, or the provision of healthcare services by private "for-profit" hospitals, first started in India in the early 1980s with the inception of Apollo Hospital at Chennai. Since then, in the last two decades, Apollo has virtually dominated the private healthcare scene. The only challenge it faced was from Wockhardt and the Escorts Group.

However, the last one year or so, healthcare has witnessed intense corporate activity as a result of which new players are making a foray while the existing ones are beefing up their infrastructure. Escorts have reportedly converted their highly profitable "non-profit" Heart Institute in Delhi to a "for-profit" model recently. Wockhardt has undertaken a fairly large growth initiative. New corporates such as Max, Fortis and Piramals, have entered the scene. Others, such as Reliance, Videocon and the Aditya Birla Group, have or are making an entry, initially through the "non-profit" route (Express Healthcare Management Jan 2002).

In today's age, every consumer wants to be served according to his or her unique and individual needs. Oganisations have also geared up to provide customised solutions, tailoring their services/ products based on actual customer preferences, rather than on generalised assumptions. Hence all the businesses are exploiting the information systems and technology to accumulate huge amounts of customer data, as they understand that the knowledge in these huge databases is important to gain competitive advantage and support various organisational decisions. There is a great need of a well-defined, simple but integrated system to extract the knowledge of the customers from these huge databases and then to apply this knowledge for making various critical decisions, particularly marketing decisions (Express Healthcare Management Oct 2005).

India is witnessing an era where new hospitals are being built at a pace like never before. There are exciting challenges that these hospitals are facing while

they are being commissioned. One daunting task that every hospital, new or old, small or big, is facing today is the task of marketing itself.
"I have spoken to countless doctors, who own hospitals, about their marketing strategies" (Express Healthcare Management Feb 2006).

It is rather unfortunate that almost all these doctors had a dismal marketing strategy, if indeed they had one. For the most part, they were not even aware that a marketing strategy needs to be crafted. What pains me is the fact that millions are spent upon creating a product called a hospital and so little is done to promote them in a professional manner. The people who offer these products are very well trained in their profession. But what is pitiable is the way this product called 'hospital' is packaged and marketed. Here is a glimpse as to how the hospitals are marketed:

2.14.1 Referrals

There is an attempt from hospitals to generate referrals from the Registered Medical Practitioners (RMPs). The hospitals appoint Public Relation Officers (PROs) for the purpose. The job of the PRO is to visit these RMPs every day and 'lure' them into referring patients. This is a bad marketing strategy. The simple reason being that once a hospital starts indulging in what is called 'cut practice', its competitors will not be far behind to follow suit. They want to lure the RMP with more money. The RMP becomes a pursued commodity who has to be won over at any cost. Commissions, free gifts, dinner and liquor are offered on a platter to the RMP sitting in a shady clinic in the outskirts of the city or in the villages. It is not legal to offer commissions for soliciting patients, yet the cut practice is rampant.

Coming back to the RMP, all of a sudden, he is made to feel very important. He has discovered a way to make a quick buck. All he has to do is coax a patient to get surgery done (even if it is not required). Once the patient consents, the RMP

rushes to the town to bargain for the 'best price' for his newly acquired scapegoat.

Now, looking at the strategic business implications of this strategy of alluring RMPs, the hospitals have dug a grave for themselves. All of them are dependent on outsourcing patients. The source that they depend upon is greedy and has no loyalty. Whatever anyone might say, hospitals have ended up on the losing side of the bargain and the RMPs have pulled the tide in their favor. The profit margins are going down even as I am writing this article. The naïve hospital owners have shot themselves in the foot (Express Healthcare Management Feb 2006).

2.14.2 Lowering Prices

This is another amateur business strategy. The logic goes- 'We are both physicians with same skills and if I offer my services at a lower price, I will get more clients.' Why do not the multi nationals learn from these new-found strategists? Why does not Pepsi reduce the price of its bottle by Rs. 2 and spell doomsday for Coke? Going by the same logic, Sony can overthrow Samsung in a month.

Thinking the other way round, why does Pepsi not lower its prices? It is because if Pepsi starts this trend, the competitor will follow suit. Do you think Coke will stay silent if Pepsi reduces the price of its 300 ml bottle by Rs. 2? Of course not, as has already been witnessed in the past in the (in)famous Cola wars but now they have made amends and are demonstrating price parity. Similar wars have been fought between Times of India and The Hindustan Times with exactly the same results and post effects. The result invariably is that both the players have shrunken profit margins. This may further result in compromising the quality of both the products.

It does make sense if Apollo hospital charges more for a normal delivery than a small town clinic where only one MBBS doctor sits. That is justifiable. But two similar competitors indulging in a price war and shrinking each others' margins is sheer foolhardy. This brings us to the million rupee question called how to market a hospital in a professional and ethical way?

To answer this question in a very brief way, here are some tips (Express Healthcare Management Feb 2006):

2.14.3 Being Unique

The phrase 'Differentiation' or USP [Unique Selling Proposition] helps here. Being original, being genuine and being different. Without imitating what the others are doing. Anyways, who will buy a cheap imitation when the original is already available? There are a lot of creative ways to be different. The hospital could be the most experienced. The hospital could have the best technology. The hospital could also be the most reliable. The hospital could be doing the same procedures differently.
Whatever the differentiation stance, it will work as long as it is authentic and well communicated to the target market. Communicating the marketing stance is yet another big topic. Yet the basic policy is not to copy someone else's uniqueness or not cutting the fees to be different.

2.14.4 Customer Relationship Management

CRM or Customer Relationship Management as it called is a very important tool to retain customers and to make sure that the word of mouth publicity is ensured for the long term.

It is a well known fact that if we retain our existing customers and make sure they buy from us again and again we can increase our business by 10 to 30 per cent.

It is cheaper to retain existing customers than to find new ones. Loyal customer will recommend the place to others. The hospital may find their friends, neighbors and relatives coming over a period of time. Perhaps, it would be advisable to appoint a PSO [Patient Service Officer] rather than a PRO.
Essentially, a CRM would include systems of staying in regular touch with the customers. It is desirable to regularly send them cards, gifts, etc. It will also include inducing the past patients to participate in activities being carried out by your hospital for social causes. Having feedback forms filled during the discharge hour of the patient is one useful CRM exercise. Suggestion boxes and patient satisfaction surveys can also be used.

2.14.5 Core Competencies

It is advisable not to try to be many things for many people. To extend the logic it is better not to be many things for the same set of people. If it is a famous orthopaedic hospital, it is useful to stay with that. It is worthless to fall into the trap of adding gynaecology or skin specialty. Yes one can get better and better in orthopaedics. No harm in that. But it is foolhardy to play with the existing brand image by making it too confusing for the target market to understand.

Why MacDonald's is not selling potato parathas? They can try to sell pizzas, but who will eat a pizza at MacDonald's when Pizza hut is specialist Pizza chain? "Stick to the knitting" is the core mantra as set out by Tom Peters. To illustrate the point, let's consider the emergence of organisational capability as a dominant paradigm. In 1988, C. K. Prahlad wrote an article in the *Harvard Business Review* called 'Core competence'. He indicated that core competence is what a company does best, based upon what it knows best. He used Honda as an example of a company that identified its core competence (internal combustion engines) and built an entire enterprise around that core technological capability. Prahlad popularized the concept of core competence which supplements Peters' mantra.

Mindless diversifications have always failed even the mega corporations. They had to resort to divestment or restructuring even to exist and sustain while most of them have perished.

Strategy is a long term proposition. So the results can not be instant. It will take time and perseverance. But then the old saying goes 'Good happens to those with patience.'

The sooner the light dawns on this critical aspect of business, namely marketing and business strategies, the better it will be for the healthcare industry (Express Healthcare Management Feb 2006).

2.15 Health Insurance

Around 70 per cent of India's population lives in villages. Of this, less than 2 per cent are insured. Though the rural health insurance market is huge, it has so far remained untapped. Recently, IRDA has constituted a committee to chalk out a plan for spreading health insurance in rural areas. Various Micro-Health insurance schemes are to be studied. Around 25 such schemes are run in rural India, most of them attached to Micro-Finance Institutions.

Says a member of the committee, "The aim of this committee will be to look at public-private partnership of micro health insurance, designing products specifically for rural areas, ways to collect premium at low cost and settle claims at low cost, micro-financing for health, strategies for encouraging large scale enrollment of rural population for health insurance and address the various hurdles in providing efficient service delivery."

Says a member of the committee, "IRDA feels that insurance companies now need to focus on health as the business that comes from the health portfolio from rural areas is negligible. Various schemes such as Yeshaswini, and Healing Fields will be studied. These schemes are very different from each other. Their

positive aspects will be taken while caution will be taken to ensure that their shortcomings are not repeated while replicating them on a larger scale."

Says Mukti Bosco, Secretary General of Healing Fields Foundation, an NGO involved with running the Healing Fields Insurance scheme, "Micro-Finance Groups are already over burdened with credit and interest tasks and have plans to enter savings. If we expect them to take on selling and servicing micro health insurance too, then it will be difficult for them. Health insurance catering to rural areas has to be low priced, efficiently managed by health management experts and has to be a homogenous Group policy to make it viable."

Lack of awareness about various schemes has been one of the hindrances in spreading rural health insurance. "If the government wishes to cover the population for lessening debt burden and to reduce poverty, then the insurance policy should cover common illnesses for which people take loans. So, a major issue to be addressed by the panel is what aspects of health should be insured under the policy and how will it be run?" she adds (Express Healthcare Management Jan 2006).

2.16 Hospital Architecture

The work on the interior design of a new hospital begins, or rather should begin, with the architectural concepts in the early design stage and end with the owners taking over the building. In a commercial or residential building, the promoter just builds and sells or leases shell space and the buyer or the tenant fits out the interior. Not so in the case of a hospital. It has to be fitted out before it is made operational. Sadly, however, hospitals are remiss?? in this respect. Not much attention is paid to interior design and furnishings until long after the hospital building is completed.

It was not until recently that the need for interior design, much less the hiring of a professional interior designer, was considered important to the effective functioning of the hospital. Those were the days when it was commonplace to refer to a sterile, dull-looking building as 'looking like a hospital'. In the prevailing attitude towards interior design in healthcare institutions, engaging the services of an interior designer was out of the question. So, hospitals asked the supplier of equipment and furniture to 'decorate the hospital' or provide their own interior design services.

All this while, great changes were taking place in the field of building hospitals and in the attitude of people towards healthcare. Advancements in medical technology, newer and sophisticated equipment and, more importantly, the realisation that hospitals should be built not only to cure mankind's physical and mental ills, but also to meet patient's emotional and aesthetic needs brought about dramatic changes in building healthcare facilities. A growing efficiency was witnessed in constructing hospital buildings to meet these new challenges. Modern medical science also recognises that attractive surroundings have a positive therapeutic effect on the patient. On the contrary, a room in which the walls are peeled and the furniture chipped may have a negative impact. It is believed to lessen the patient's ambition to get well and thereby lengthen convalescence. It was rightly felt therefore that a hospital couldn't be built without highly skilled professional architects and engineers, nor should its interior be designed without skilled interior designers (Express Healthcare Management Dec 2005).

Businesses realise that the first thing that ever gets sold is the salesperson. Product always comes next. It is, therefore, not surprising to see to what lengths businesses go in order to "package" themselves, their front office staff and "sales personnel" attractively. One important aspect of an organisation's business look is how its employees dress – "business or professional dressing" as it is called. In the hospital set-up, cleanliness is a vital element in providing high quality medical

care. And neatly dressed employees in fresh, neat uniforms not only lend a therapeutic and aesthetic touch but also do much to market the hospital.

Of the many big and small things and activities that go to build or enhance a hospital's public image, the one that is very relevant to our topic of interior design is graphic or visual art. Graphic design is the applied art of arranging image and text to communicate a message. The image of the hospital that patients and visitors carry with them out of the hospital depends, among other things, on the hospital graphics. Signs, symbols, directories, and room identification play an important visual part. Good architectural graphics have assumed great significance in the context of increasing size and complexity of our modern structures. Take, for instance, a large airport building which depends on clear and attractive graphic displays to make the spaces work. Any one can follow the signs and reach his or her destination. Finding rooms on large hotel floors is made easy by room numbers and effective signs. (For example, Rooms 315 – 325 >>>). So also the floor numbers right in front as one gets off the elevator. But then, hospital is a more complex and bewildering place especially to those who are sick in body and mind.

Two types of graphics are of importance to the designer. They are the directional graphics or the signage system, and the printed matter including hospital logo.

A mass of information must be transmitted visually to patients, visitors and personnel so that time and motion are not wasted. A signing programme produces these directional signs both inside and outside the hospital (Express Healthcare Management Jan 2006).

A corporate logo is a component of a brand identity. The shape, colour, typeface, etc of a company's logo should be distinctly different from the logos of other organisations in a similar market. The most effective logos should be recognisable instantly and evoke some sort of emotional response. "Logos and

other organisational symbols are like a kind of flypaper to which associations get stuck," said one expert.

The work of legendary designer Paul Rand – considered the father of corporate identity – has been seminal in launching this field. All the same, he said it is the organisation that 'makes' the logo. "A designer 'designs' the logo. But the organisation 'makes' the logo," he said, signifying the organisation's philosophy that goes into it. Logo gurus feel that logos should have four important attributes: (a) Recognisable, yet unusual (b) Simple, yet rich (c) Contemporary, yet timeless, and (d) Memorable, yet appropriate.

A Mother and Child Hospital's logo is imprinted on a T-shirt that the hospital gives to all mothers-to-be who come to the antenatal clinic. It says: "When I go into labour, take me to Mercy Hospital." The hospital gives a baby T-shirt to every baby born in the hospital that proudly says: "Special Delivery. I was born at Mercy Hospital" or "I am a Mercy Hospital Baby." A hospital whose emergency department enjoys a high professional and market profile gives to every patient on discharge a stuffed teddy bear, bunny or panda to take home and strategically place it by their telephone. On it is the logo of the hospital and the words: "We are at your service 24 hours. Please call us: Emergency: 305 772 6000 St. Martin's Hospital."

Nearer to home, logos of Jaslok Hospital, Apollo Hospital and Escorts Heart Hospital may be rated among the best.

Graphic design and the logo should be thought through early in the design stage. This will enable the graphic designer to participate in the total concept. Too often, hospitals make the grievous mistake of putting off this important work to a later time, and realize that at the time the graphics and the logo are needed, it is too late to develop them.

Inpatients spend 24 hours of the day in their rooms. For them hospital is their temporary home. Since tastes differ and what one patient likes another may not, muted pastels are recommended. The colours that should be avoided in patient rooms are bright blues, soft purples, lavender tones, bright yellows or strong, definite colours of any kind. On the other hand, melon green, dusty rose, rose tone, aqua, pecan gray and honey yellow have been used with a great deal of success (Express Healthcare Management Feb 2006).

2.17 Professional Consultancy Services

In 1998, while working together on a hospital project at Surat, cardio-thoracic surgeon Dr Ramakant Panda offered Dr Vivek Desai, MD of HOSMAC to plan and design Asian Heart Hospital. Dr Desai, who had till then not executed any such mega project, was both shocked and surprised. "I could not believe that Dr Panda was seeking my help for such a prolific project," recollects Dr Desai. After seven years and 120 projects, the Rs 2-crore-firm HOSMAC is considered one of the leading hospital consultancy firms in India.

For a sector which made a very sluggish start, the success story are many, all of which echo a similar exponential growth. So much so that when recently a group floated tender to build a hospital in Delhi, more than 20 groups applied for it. To think of it, even four years back, consultancy firms had to peddle their services to hospitals.

Five years back, there were not more than five firms. Today, the sector teems with more than 20 established firms and there are more than 50 individual consultants who work both full-time and part-time. The consultancy market has also opened up three years back. And today, analysts clock this sector at Rs 800 crore, set to have an annual growth rate of 15-20 per cent.

Some Major Hospital Consultancy Firms in India

Medicontrivers India Pvt Ltd, Mumbai

Started in 1993, its major projects are Ruby Hall Clinic in Pune, KLES hospital, Belgum, Rajiv Gandhi Rural Hospital near Belgaum and medial college in Kerala.

Ace Vision Health Consultant Pvt Ltd, Jaipur

Over an year old, they render services in clinical audits and clinical governance. Managed by husband-wife couple of Sachin and Sheenu Jhawar, the firm is providing management consultation to Apex Hospitals Pvt Ltd, Jaipur, Mahatma Gandhi Mission Trust Hospital, Aurangabad, State Institute of Health and Family Welfare), Rajasthan. The firm has three full-time working experts. Other are consulted on project to project basis.

Professional Health Planners, New Delhi

It provides services in planning, concept & architectural design, drawings, and engineering services, hospital services planning, design and implementation, hospital systems development & implementation and medical and non -medical equipment management. So far, it has completed over 35 projects.

Hospic, Mumbai

Started 12 years back, the firm has provided consultancy services to 120 hospital projects and 9 are in the pipeline. Their area of specialisation are market feasibility study, medico-technical feasibility study and financial feasibility study, and also providing criteria and coordination in planning and designing the hospital.

Dr Kamle's Prescription, Boston, US

This 30-year-old firm has completed over 500 projects so far and has 10 in the pipeline. Their areas of specialisation are market research, feasibility studies, concept, design, architecture, equipment, human resources ,management, computerisation and other 23 parameters of hospital

functions, all of which are dealt by consortium specialist ,all under one-roof. It has 47 specialists drawn from the areas of architecture, finance, management, engineering and scientific background.

Total Hospital Solutions, Jaipur

It has done 18 major hospitals related projects for various national and national funding agencies. About 3 hospital projects are currently under implementation. Their areas of specialisation are hospital market research, hospital planning, operations management, HMIS, HRD, community financing and its innovative research for understanding the future trends and pro- poor interventions.

Apollo Hospital Enterprise Ltd, Chennai

Their areas of specialisation are project and operations management consultancy services from conceptualisation to commissioning of a wide range of healthcare models.

NOUS Hospital Consultancy (P) Ltd, New Delhi

It started in 1983 as a registered firm Hospital Corporation of India and became a corporate entity in 1993. It has a total of 80 projects, of which 68 have been completed. It undertakes feasibility, planning, designing, construction, equipment planning, recruitment of departmental heads, pre commissioning and commissioning. It has a group of 23 associate consultants.

KSA Technopak, New Delhi

Their services include strategic planning at the system, institutational and clinical programme levels as well as functional work in such areas as ambulat\ory care.

H-PAMCO, New Delhi

Founded in 1996, H-PAMCO specialises in technology launches, products marketing projects, medical waste management, lifestyle modifications courses, IT-based solutions, and general operational audits (Express Healthcare Management Jan 2006).

2.18 Accreditation

Recognising that the care of the sick is their first responsibility, hospitals must at all times strive to provide the best care and treatment to those, who are in need of hospitalisation. Some hospitals, in very early times, accepted certain values and principles that conformed to high professional standards. Other hospitals seeking similar goals soon joined them. This led to the development of definition of principles, responsibilities and standards in patient care, ultimately encompassing almost every aspect of the hospital including its design, construction, operation, maintenance and environmental safety. Standards are used to describe the broad bases and fundamental policies as well as specific details for levels of patient care. They also apply to supportive and administrative services that are directly or indirectly concerned with patient care or affect it one way or the other.

A standard may be defined as a measure of quality established on a voluntary basis by those subject to it, or imposed upon them by a legal authority. One of the most dramatic achievements of the American College of Surgeons was the "Hospital Standardisation Movement" initiated early in the twentieth century. With high ideals, the founders drew up, what is known as the "Minimum Standard" which became a veritable constitution for hospitals, in which were set forth requirements for the proper care of the sick. The usage of the term "hospital standardisation" paralleled the emphasis on standardisation in industry. The standard was made effective by an annual survey of all hospitals having 25 or more beds. When the first survey was conducted, only 89 hospitals in the United States and Canada could meet the requirements. Thirty-three years later, 3,353 hospitals were complying with the requirements. This is significant considering that compliance with standards was voluntary.

Quality, a synonym for standards, is of paramount importance to hospitals. At no time in history have hospitals been under so much attack for failure or deterioration of quality as they are today. Malpractice suits are becoming

common and there is growing criticism of hospitals for their various acts of commission and omission. Negligent and unethical practices in patient care, mismanagement, lack of probity and accountability, unhygienic conditions in and around the hospital, high incidence of hospital-acquired infection because of lack of quality assurance programmes, environmental pollution caused by hospital's waste disposal, to name just a few.

In a country, where charitable and not-for-profit hospitals abound, most of them struggling to stay afloat, even the standards set by the National Board for Testing and Calibration of Laboratories (NABL) have not found many takers. High cost is said to be the deterrent. Moreover, if the exercise of getting accreditation by JCI and JCAHO is to attract foreign medical tourists, it is a pretty unconvincing reason for the huge investment that is involved. If hospitals are spruced up with cutting edge facilities to cater to foreign customers, making them unaffordable to the common man in the process, who cares for millions of our own patients?

Conversely, there are quite a few hospitals across the country without JCI and JCAHO accreditation, which have been healthcare destinations for foreign patients nevertheless (Express Healthcare Management Sept 2005).

Wockhardt Hospitals, Mumbai, recently has become the first superspeciality hospital in South Asia to achieve accreditation from Joint Commission International (JCI), USA. Apollo Hospitals a few months back had received JCI accreditation but it was for its general, multi-speciality hospital.

With this, Wockhardt Hospitals joins an exclusive group of 71 hospitals worldwide, which have passed JCI's stringent clinical quality standards. JCI is the gold standard in global healthcare standards. The accreditation process requires a hospital to comply with almost 1,300 measurable standards. Wockhardt is the only HMI-associate outside the US to win this recognition.

The JCI accreditation was awarded after a rigorous onsite evaluation of Wockhardt Hospitals, Mumbai by an international surveyor team of healthcare experts in August this year.

The hospital has established protocols, drills and audits for safe intra-hospital and inter-hospital transfer of patients and similar procedures for infection control and patient safety. Wockhardt is participating in a quarterly global study, which monitors infection rates across leading hospitals of the world, he added (Express Healthcare Management Dec 2005).

Today, Indian healthcare organisations are waking up to international accreditation. The Indraprastha Apollo Hospital in New Delhi and Wockhardt Hospital in Mumbai, last year secured Joint Commission International Accreditation (JCI) and now Asian Heart Institute in Mumbai too is gearing up for it. In the country, associations like CII-IHCF and QCI are working towards forming National Accreditation Board for Hospitals and Healthcare Providers (NABH). Parallel to this initiative, is the formation of Indian Confederation for Healthcare Accreditation (ICHA), a national accreditation body (Express Healthcare Management Jan 2006).

2.19 Mergers & Acquisitions

Mergers and Acquisitions are the new paradigms of hospital industry. The acquisition of Delhi-based Escorts Heart Institute and Research Centre by Fortis Group of Hospitals will mark the beginning of an era of inorganic growth in hospital sector. This acquisition may encourage smaller players to acquire nursing homes, thus giving them a corporate management leading to an accelerated evolution of Hub & Spoke model.

Merger and Acquisitions cannot be successful if the employees from both the organisations become obstacles to the integration process as they have their apprehensions about the organisation culture, leadership and management style.

The biggest HR challenge in merged entity is to facilitate people integration and transform the diversified skills and knowledge into transfer of learning within the member organisations. Key talents in both the organisations may feel insecure as to:

- Organisation policy on right sizing the merged organisation
- Organisational hierarchy in the merged organisation
- Job responsibility in the merged organisation
- Terms and conditions of employment
- Benefits apart from the salary in the merged entity
- Performance Management System and career progression in the merged organization (Express Healthcare Management Nov 2005).

2.20 Patient Grievance Cell

Amit (name changed) went to see his younger brother Siddharth, who was operated for an ailment in a well-known Mumbai-based private hospital. Amit was denied entry into the ward, where his brother was staying, post-operatively and was asked to produce a consent letter duly authorised by the medical director to enter the ward. It was near to impossible for Amit to access the medical director at 7 in the evening, as the director was available only in the morning.

After rounds of requests and an hour of waiting, the supervisor permitted Amit to see his brother. The case of Amit reveals the plight of many patients and their relatives, who are denied immediate redressal of their grievances. The case would not have been so time-consuming and frustrating, if a speedy and efficient grievance cell would have been in place to help him.

Grievance cell is assuming importance in India, as patients have become more conscious of their rights. Moreover, the accrediting and rating agencies insist on documentation of patient's feedback.

According to Dr Bidhan Das, vice president, corporate affairs, Rockland hospital, it is important that patient is informed about his/her rights to seek justice, which is why it is imperative that all hospitals have Citizen's Charter, highlighting the rights of patients vis-a-vis the hospitals.

However, the situation is bleak in government hospitals, private hospitals and nursing homes, more so in the former as the concept- consumer is the king- does not exist in government hospitals. According to Alok Mukhopadhaya, chief executive, Voluntary Health Association of India (VHAI), "The private hospitals are overcharging and there is no check on them. In both the situations, the loser is the gullible patient and his relatives." There is no system of consumer redressal in primary and secondary healthcare institutions, he adds.

In big private hospitals in metros, the consumer redressal committees are on paper only, laments Mukhopadhaya and adds that there's need to initiate a consumer movement so that patients instead of being at doctors' mercy are informed of their rights. Though the concept of a patient grievance cell is gradually assuming significance in large private hospitals across the country, the hospital management have a long way to go in putting such a system in place as compared to the west, where the system has evolved manifold.

According to Dr Suganthi Iyer, assistant director, medical services, Hinduja Hospital, and a medico-legal expert, "Grievance cell can be compared to a quasi-judicial body and is an internal inquiry cell within the hospital set-up in order to investigate as to what actually has transpired between the hospital and the patient."

In such a set up, the aggrieved patient puts up his complaint or petition before the grievance cell. "The cell should just not be defensive on behalf of the hospital and is supposed to give a fair hearing to both the parties concerned on the principles of natural justice in an unbiased manner," adds Dr Iyer. The grievance

cell has the power to investigate and make decisions. However, some experts believe that the role of the grievance cells is to explain the adequacy and rationale of the medical care delivered. Says Joe Curian, chief spokesperson, Association of Hospitals (AoH), "The patient needs detailed explanation, when the cost of the treatment exceeds the indicated cost or there is a death due to a complication that has occurred during the course of the treatment."

Grievance cell in various hospitals

Bombay Hospital: It has a team of administrators or a core team to look after the patient grievances. Says medical director Dr D P Vyas, "We are always accessible on any eventuality of patient grievance and our core team comprises of medical director, deputy medical director, medical superintendent, deputy medical superintendent, deputy officer on special duty and all the respective heads of the department."

Jaslok Hospital: According to medical superintendent Dr J P Sharma, "Besides feedback form given to patients, there is a suggestion box, where the patients can post their complaints in written format. The box is opened by the medical superintendent under the strict supervision of a hospital staffer, deputed by the medical superintendent for ensuring confidentiality and security of the complaints."

Hinduja Hospital: The Hospital has a patient relationship department handled by a dedicated team of customer service executives (CSEs) for the redressal of patient grievances on a daily basis. According to Anupam Verma, director, administration, Hinduja Hospital, "The cases are first taken up by the CSEs and then forwarded to the management team or the respective head of the departments." CSEs are empowered by the core committee of the hospital to solve cases of patient grievances on an urgent or priority basis. The core committee of the hospital comprises of the Administrator, Director (Professional Services), Director (Medical Quality and Ethics), CEO and the HR team.
The patient relationship department resolves the grievances on a case-to-

case basis within seven days. Generally, three to four cases of critical nature are resolved in a month.

Sir H N Hospital: The hospital has a floor supervisor and a public relation officer, who visits every patient daily and receives complaints and grievances. An officer looks after the administration of the hospital even in the night. Hospital administrators and trustees are always accessible to patients and relatives. When a patient is discharged from the hospital, he/she is given a feed back form. These grievances are studied and remedial actions are initiated.

Rockland Hospital, New Delhi: The hospital has a five-member redressal committee for attending to the complaints of patients. The hospital's complaint box is opened on a weekly basis to address the issues.

Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh: The hospital has a six member redressal committee under the chairmanship of a senior professor. Other members are from the medical fraternity, except the convener. Besides suggestion/complaint boxes, people can voice their grievances directly to the medical superintendent or even the director. The committee holds its meeting every month, the feasible suggestions are implemented and issues are taken up. The Citizen's Charter of PGIMER, Chandigarh is currently awaiting approval.

Dharamshilla Cancer Hospital: According to director Dr S Khanna, "We have a very strong redressal system. There's a central complaint register at the front desk and satellite complaint registers at all counters." Complaint register is sent to the director on a daily basis. The hospital has a Preventive Action Group (PAG) comprising of five members, which include medical superintendent, deputy medical superintendent. The meetings take place every day with all the concerned departments. Patients are given customer feedback forms at the time of admission, which they are asked to fill up upon discharge.

The grievance cell helps to reduce frivolous litigation in consumer courts. Opines Dr Lalit Kapoor, chairman, medico-legal cell, Association of Medical Consultants (AMC), "The grievance committee ensures that any case of patient dissatisfaction is resolved at the earliest to avoid any medico-legal implication."
According to Dr R K Anand, medical director, Jaslok Hospital, "The number of medico-legal cases in Consumer Courts can be reduced if patients' complaint is heard by the grievance cell in hospitals. During my tenure with the Association for Consumers Action on Safety and Health (ACASH), I observed most of the cases related to patient grievances were not due to medical negligence but were attributed to the lack of communication between the doctor and the patient."

Twenty five per cent of the cases taken up by the grievance cells are sorted out by explaining to the patient, the nature of shortfall on the part of the hospital or hospital authority, say experts. The remaining 75 per cent of cases go to consumer courts (Express Healthcare Management Aug 2005).

2.21 Medical Tourism

A lot has been discussed about Medical Tourism in the opening Chapter itself. Some practical examples are the only things given below to bring the point home.

"The 165 cm tall French national is undergoing a procedure which will help him add a valuable 7 cm to his height. He is 5 feet 2 inches and will be 5 feet 7 inches in another 70 days. He wanted to undergo it in China earlier but complaints of high infection rates from his friends made him choose Delhi. Cosmetic lengthening is carried out by using the Ilizarov technique in which the outer layer of the bone is cut. A frame with screws is attached to the limbs. These screws are rotated every six hours and help lengthen the bone by 0.25 mm at one go. Muscles and nerves grow with the increasing stress.

An American patient was operated for morbid obesity where doctors performed a bypass of the stomach in an effort to reduce the patient's weight. She underwent Roux-en-Y gastric bypass at Sir Ganga Ram hospital. Gastric bypass surgery is a bariatric surgery performed on patients suffering from extreme obesity. The idea is to reduce the patient's food intake by reducing the size of the stomach.
Lot of foreigners and NRIs are coming for implants and porcelain laminate veneer (tooth alignment) procedures. Most of these treatments are minimally invasive and cheaper in India.

Two-and-a-half-year-old Noor Fatima, from Pakistan, had a congenital heart ailment. She had multiple holes in her heart, a defective valve and a wrongly connected blood vessel. Her parents, the Nadeems, had been told by a relative--a nephrologist in Boston--that India was their best option for surgery. In the United States and Europe, complex open-heart surgery of the kind Noor needed would cost around $70,000 and the Nadeems couldn't afford that. The procedure was too complicated for any hospital in Pakistan, where heart surgery is performed but paediatric heart procedures are rare.

So in July, when India and neighboring Pakistan decided to renew bus services between the two countries, the Nadeems secured a visa to visit India and rushed Noor to Narayana Hrudayalaya, a top cardiac-care provider in Bangalore. In the event they didn't have to pay a cent--thanks to the hospital's goodwill and a groundswell of support from all over India. But if even if they had paid for the procedure, it would have cost them only $4,400.

Noor Fatima has become a symbol of the goodwill that exists among ordinary Indians and Pakistanis. But she is also emblematic of a quiet revolution sweeping India's health-care sector. India's private hospitals are becoming sought-after destinations for people around the world who need a range of medical procedures. Analysts say that as many as 150,000 medical tourists came to India last year. Some industry watchers say that number is higher, as 70,000 people

came for medical treatment from the Middle East alone. A study last year by the Confederation of Indian Industry, or CII, and international management consultancy McKinsey & Co. said medical tourism could earn India $2 billion a year by 2012. The Indian government predicts that India's $17-billion-a-year health-care industry could grow 13% in each of the next six years, boosted by medical tourism, which industry watchers say is growing at 30% annually. http://www.medicityindia.com/testimonials.htm

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CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design and the procedures for conducting the study. Specifically, this chapter describes the instrument development including pilot testing and the sampling, data collection, and data analysis procedures. The data has been processed through the eleven steps in the Marketing Research Process (Burns and Bush 2003 28).

3.2 The need for marketing research

Marketing research is needed when decision makers must make a decision and they do not have the information to help them make the decision.

The need for Marketing research exists since the data, on customer satisfaction with regards to the corporate healthcare sector, is hardly available.

3.3 Definition of the problem

Defining the problem is the most important step in the research process. Why? What else matters if we have defined the problem incorrectly?

The problem here is identified in terms of the customer satisfaction.

Are the hospitals doing enough to keep the patients/customers happy and satisfied? Is it important?

3.4 Establishing the Research Objectives

Research objectives, although related to and determined by the problem definition, are set so that, when achieved, they provide the information necessary to solve the problem.

The relevance of the research is both from industry and academic viewpoints. The objective of this research is:

- To ascertain the Customer Service Quality perceptions vis-à-vis the expectations.

The research sub objectives to attain the main objective are:

- To understand the service standards maintenance thru responsiveness, reliability and assurance.

- To understand the convenience, empathy and tangibles delivery against the expectations.

3.5 Determining Research Design

While every research project is different yet there are enough similarities among research projects to enable us to categorize them by the research methods and procedures used to collect data and analyze data.

Research Design is the framework or plan for a study (research) used as a guide in collecting and analyzing data. It is also a blueprint to follow in completing a study. The purposes of making a proper research design are:

To ensure that the study is relevant to the research problem

To ensure that the study uses relevant and economical procedures

To learn more about research methods

There is never a single, correct, optimal or standard method for carrying out research (Molde university College website).

Our basic research design process is Descriptive. Further the study is cross sectional in nature employing a correlation/paired comparison research design to describe the statistical association between two or more variables.

3.6 Identifying Information Types and Sources

Basically, two types of information are available to a marketing researcher: secondary data and primary data.

The most major type of information utilized by us is primary data. This is done thru one on one interview at the place of discussion i.e., the hospital itself, both inpatients as also the outpatients.

The literature review is a secondary data type. The sources have been books, periodicals, websites, printed literature from the hospitals etc.

3.7 Determining Methods of Accessing Data

How is this accomplished? It depends largely upon the type of data needed. Compared to the primary data, accessing secondary data is relatively easy, especially in today's age of the internet.

The survey research methods have been employed for accessing the primary data. This has been taken care of thru designing of the Questionnaire and self-administered: face to face interviews. Questionnaires were also sent to outstations for responses from all over India.

The secondary data is taken from newspapers, books, periodicals, internet search, printed literature from the hospitals, and stock exchange reports etc.

3.8 Design Data Collection Form

The design of the data collection that is used to ask and record information gathered in marketing research projects is critical to the success of the project.

3.8.1 Instrument Development

A structured questionnaire was developed to collect data on the variables in this study. The questionnaire was adapted from the famed Service Quality: SERVQUAL (Parasuraman, Zeithaml, and Berry 1986, 1988); Ethics: Corporate Ethics Scale: CEP (Hunt, Wood, and Chonko 1989); Ethics: Marketing Norms Ethics Scale (Vitell, Rallapalli and Singhapakdi 1993) and Customer Orientation (Deshpande, Farley, and Webster 1993). A modified SERVQUAL questionnaire relevant to the healthcare industry was constructed by including items from the original five dimensions (Tangibles, Reliability, Responsiveness, Empathy and Assurance) of the SERVQUAL instrument developed and updated by

(Parasuraman, Zeithaml, and Berry 1986, 1988). Cronin and Taylor (1992) test several service quality models, as well as the relationships among service quality, satisfaction, attitude, and purchase intentions. Their research supports measuring service quality as a unidimensional, performance-based construct called SERVPERF, which is equivalent to the 22 PERCEPTION items of the original SERVQUAL measure.

The items were refined and paraphrased in both wording and contextual application as appropriate to suit research purposes. Next, in order to obtain an even more comprehensive and industry-specific measure of the service quality construct, the research based upon the healthcare sector was undertaken. The instrument used for the Pilot study is attached in Appendix A.

The respective scales were used for the pilot so as to get the feedback on all the parameters i.e., Expectations and Perceptions, Ethics, and Customer Orientation. *The pilot was administered to 50 respondents in total. The one on one interviews* brought out some of the shortcomings clearly. The same are listed below:

- The questions were more Americanized and less pertinent in the Indian markets.
- Some Indian features in terms of what Indian patients look forward to, were altogether missing.
- Customer orientation, ethics scale and CEP questions were very direct while the questions from SERVQUAL were subtle and gentle and could get the desired inputs.
- It was very difficult to cater to so many cross sections.
- The feedbacks from Hospital staff were either strictly toeing the hospital line or were vitriolic against the Hospital Management. While the Doctors were 100% positive about the hospital the support staff was not.

- The respondents' suggestions were better tuned to a single questionnaire.

The comments and the observations from the pilot led to:

- A single common questionnaire with questions from the different questionnaires merged for the patients.
- Addition of many questions about access, water, telephone services, pricing, ethics etc.
- Deletion of some questions which were either not very pertinent to Indian public or they were not aware of.
- The Likert scale with the legend was placed at a conspicuous place to aid the respondents.
- The questionnaire was administered to same person for getting coherent responses against perceptions vis-à-vis the expectations hence, catering to a before after kind of a dichotomous relationship.

The duly tested and finalized Questionnaire is displayed as Appendix B. All the Questionnaire questions were close ended except for the demographic profiling questions.

The first section of the instrument consisted of forced-choice questions about demographic characteristics: age, gender, inpatient/outpatient, and urban/rural status while the questions on Income, ailment, education, age and the hospital name were open-ended.

3.9 Determining Sample Plan and Size

Typically, marketing research projects study subsets, called samples, of populations in order to learn about the entire population.

3.9.1 Sampling Plan

Under this heading, details about the population, sampling frame, sampling unit, sampling procedure, sample size and contact method have been provided.

3.9.1.1 Population

All the patients visiting Corporate Hospitals as inpatients or outpatients in India form the population of this study. The charitable hospitals have been kept out of the scope of this study. The Universe or the population is thus the names of the patients registered with the respective corporate hospitals.

3.9.1.2 Sample Frame

The population for this study as stated above is scattered all around India registered with one or the other corporate hospital. An all India study was, therefore, not feasible. The industry leaders and academicians were consulted so as to get a truly representative sample so as to avoid the biases. The number of corporate hospitals in India is not huge but the branches of different groups are many. In order to make it a representative sample the following hospitals were considered for narrowing down.

- Apollo Hospitals
- Escorts Hospitals
- Fortis Hospitals
- Max Hospitals
- Tata Hospitals
- Wockhardt Hospital

Although, subsequent upon the merger of Escorts Hospitals with Fortis Hospitals the two units are from the same group, yet they retain super specialized character in that the Escorts Heart Hospital caters only to Cardiac care. Tata has no presence in North India. Questionnaires were sent to Tata, Mumbai and Wockhardt, Mumbai by courier. The following was thus the sampling frame for our study – including all the Inpatient as also the out patients:

- Escorts Heart Institute and Research Centre, Delhi
- Fortis Jessa Ram Hospital, Delhi
- Gujarmal Modi Hospital & Research Centre for Medical Sciences, Delhi
- Indraprastha Apollo Hospital, Delhi
- Max Devki Devi Heart & Vascular Institute, Delhi
- Pushpawati Singhania Research Institute for Liver, Renal and Digestive Diseases, Delhi
- Tata Hospital, Mumbai
- Wockhardt Hospital, Mumbai

The endeavor was to include all the major corporate hospitals, preferably multibranch, in the study.

3.9.1.3 Sample Unit

Who is to be surveyed or who can constitute the sampling unit, is very critical and needs to be answered rightly since the proper prediction about population can be made only when the sampling units are the true representative of the population. Sampling unit for this study is the Corporate Hospital patient of the abovementioned Hospitals be it inpatient or outpatient.

3.9.1.4 Sample Size

Sample Size is one of the most important parameters in the sample, being the true representative of Population or the Universe under study. It is paradoxical to state here that the size of the population is not that important as the variability between the respondents. Assuming the highest variability of 50% and designing for a ± 5% Sample error at 95 percent level of confidence the number of respondents required is 384 (Burns and Bush 2003 392). We have taken a sample size of 500 out of which 404 questionnaires were administered personally while 100 were sent by courier to Tata Memorial Hospital and Wockhardt Hospital, Mumbai. The questionnaires were to be got filled by the hospital from their patients. The response rate against the direct mail respondents was a poor 2% and therefore the total sample size came to 406. Hence the number of the samples is sufficient to cater even the worst case scenario of 50% variability (in terms of the largest sample size).

3.9.1.5 Sampling Procedure

The target population for the patients' study consisted of healthcare service users at the six listed hospitals in Delhi and NCR and two at Mumbai. There being no published list or public domain or directory of corporate healthcare patients the survey was based on the random visit at random times to the Delhi Hospitals for interaction with randomly chosen patients without any bias or judgment. The study was also undertaken at the respective hospitals at different times to further minimize the bias. The Mumbai segment was covered through mailed questionnaires

3.9.1.6 Contact method

At the pilot stage as also during the actual survey stage, the questionnaires were filled by interviewing them personally. However, some questionnaires were sent by mail.

The final realized sample included a total of 406 usable questionnaires, representing 79.60 % success rate primarily due to near 100% success rate with the personal interviews.

The questionnaire was pre-tested using a convenience sample of approximately 50 respondents. Final data was collected over a period of three months. The study included a variety of respondents, like both genders, rural/urban, inpatients/outpatients to minimize any bias.

We have used Stratified Random Sampling in the said hospitals by taking randomly equal (nearly) number of respondents so as to study any relationships between the two. 216 outpatients were interviewed while 190 inpatients were the random respondents cutting across various illnesses, genders and other demographic details.

3.10 Collection of Data

Data collection is extremely important because, regardless of the data analysis methods used, data analysis can not "fix" the bad data (Clancy and Shulman 1994 63).

The data was collected on the Questionnaires personally to minimize the nonsampling errors. The questionnaires were not got filled up from the non interested or "much in a hurry" respondents.

3.11 Analyzing Data

Once data are collected, data analysis is used to give the raw data meaning. Data analysis involves entering data into computer files, inspecting the data for errors, and running tabulations and various statistical tests. The first step is the data cleaning.

3.11.1 Reliability and Validity of the Instrument

Measures of variables should have reliability and validity (Cronbach, 1971; Nunally, 1978) so as to draw valid inferences from the research. Reliability deals with how consistently identical measures produce identical results (Rosenthal & Rosnow, 1984), and it has the two dimensions of repeatability and internal consistency (Zigmund, 1995).

Internal consistency refers to the ability of a scale item to correlate with other items in the scale that are intended to measure the same construct. Items measuring the same construct are expected to be positively correlated with each other. A common measure of the internal consistency of a measurement instrument is Cronbach's alpha. If the reliability is not acceptably high, the scale can be revised by altering or deleting items that have scores lower than a pre-determined cut-off point. If a scale used to measure a construct has an alpha value greater than 0.70, the scale is considered reliable in measuring the construct (Hair, Anderson, Tatham, and Black, 1998; Nunnally, 1978; Leedy, 1997).

According to Schuessler (1971), a scale is considered to have good reliability if it has an alpha value greater than 0.60. Hair, Anderson, Tatham, and Black (1998) suggest that reliability estimates between 0.6 and 0.7 represent the lower limit of acceptability for reliability estimates.

In this research, the multi-item scales measuring expectations and perceptions of the patients were checked for reliability by determining Cronbach's alpha and an

alpha value of 0.60 or greater was considered acceptable. The validity of a measurement instrument refers to how well it captures what it is designed to measure (Rosenthal & Rosnow, 1984). Several different types of validity are of concern: content validity, the degree of correspondence between the items selected to constitute a summated scale and its conceptual definition; criterion validity, the degree of correspondence between a measure and a criterion variable, usually measured by their correlation; and construct validity, the ability of a measure to confirm a network of related hypotheses generated from a theory based on constructs.

Cronbach's alpha coefficient ranges from 0.0 to 1.0 and reflects the strength of the relationship between items within a scale. If the Cronbach's alpha coefficient is close to 1.0 then it implies that the item is measuring similar dimensions of a construct.

The Tables below demonstrates each of the Alpha values for the 64 variables to be much above 0.60. The 64 variables are: 32 variables for expectations while the second batch of 32 variables is about the perceptions on the same attributes. To be specific, in the case of the Expectations instrument the alpha value is in excess of 0.90 without an exception. Similarly the alpha value for each of the 32 variables in the Perceptions instrument is above 0.90. The Standardized item alpha = 0.9101 for the Expectations questionnaire and the value of Standardized item alpha = 0.9254 for the Perceptions questionnaire.

This establishes the reliability and validity of the instrument without any doubt and hence no fine tuning or changes in the Instruments are required.

Table 3.1: Cronbach's Alpha Coefficients

Questionnaire	Cronbach Alpha Standardized
Expectations Scale (32 Items)	0.9101
Perceptions Scale (32 Items)	0.9254

Table 3.2: Reliability Analysis for Expectations Questionnaire

RELIABILITY ANALYSIS - SCALE (CRONBACH'S ALPHA)

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	138.8251	112.7521	10.6185	32

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.3383	3.7217	4.9261	1.2044	1.3236	.0939

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.4324	.0884	.8828	.7945	9.9921	.0263

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
LOCATION	134.2044	108.7556	.3266	.9047
PHONE	134.6970	105.4166	.5076	.9020
RECEPTIO	134.5591	106.6916	.4645	.9027
QUEUE	134.6773	104.9203	.5081	.9019
EQUIPMEN	134.9507	106.2297	.3555	.9050
HYGIENE	134.0837	107.8893	.4333	.9033
SYMPATHY	134.0172	108.1355	.4951	.9029
AESTHETI	134.3793	105.9249	.4865	.9024
CASHIER	134.7734	106.2547	.4377	.9031
PHYSICAL	134.9507	105.4297	.5078	.9020
ETHICAL	134.3966	107.5140	.3544	.9045
NURSING	134.3867	105.8229	.5053	.9021
WATER	134.4926	105.4851	.4980	.9021
CANTEEN	134.8621	105.7439	.5144	.9019
TELEPHON	134.8596	106.4518	.4132	.9036
CREDITCA	134.8300	104.3488	.4411	.9035
EMERGENC	134.0690	107.7483	.4355	.9033
QUERIES	134.5320	105.2471	.5035	.9020
SIGNAGES	134.4138	104.8209	.5731	.9010
DIAGNOST	134.1823	105.2062	.5681	.9011
MEDICINE	134.3325	107.0077	.4895	.9025
GRIEVANC	134.6773	104.5302	.5302	.9016
LIFT	134.5049	106.4481	.4149	.9035
UNIFORM	134.2709	107.2597	.4090	.9036
INDIVIDU	134.4704	106.7781	.3596	.9046
PRICING	134.5148	104.5467	.4217	.9040
QUALIFIE	133.8990	109.8737	.4477	.9040
INFECTIO	134.0542	106.2292	.5557	.9016
WASTE	134.4138	102.5740	.6003	.9002
PERMISSI	135.1034	102.9424	.4682	.9033
OPDTIME	134.2635	107.4143	.3969	.9037
VENDOR	134.7562	106.7577	.4803	.9026

Reliability Coefficients 32 items

Alpha = .9056 Standardized item alpha = .9101

Table 3.3: Reliability Analysis for Perceptions Questionnaire

RELIABILITY ANALYSIS - SCALE (CRONBACH'S ALPHA)

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	118.5419	180.1254	13.4211	32

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	3.7044	2.9828	4.4581	1.4754	1.4946	.1056

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.5885	.4136	1.3948	.9812	3.3726	.0334

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
PLOCATIO	114.4754	170.1907	.5049	.9221
PPHONE	114.8670	167.9576	.5683	.9212
PRECEPTI	114.5813	173.5329	.3624	.9237
PQUEUE	114.8695	168.4693	.5759	.9212
PEQUIP	114.9828	170.5750	.4906	.9223
PHYGIENE	114.3054	166.1929	.5930	.9209
PSYMPATH	114.3547	168.9356	.5298	.9218
PAESTHET	114.7414	164.4934	.6265	.9203
PCASHIER	114.9901	172.6419	.4171	.9231
PPHYSICA	115.0616	171.0258	.4884	.9223
PETHICAL	114.5985	174.4483	.2762	.9248
PNURSING	114.5936	170.8542	.4806	.9224
PWATER	114.8867	170.3328	.4457	.9228
PCANTEEN	115.1847	171.2473	.3833	.9237
PTELEPHO	115.1576	169.0961	.6032	.9210
PCREDIT	115.2167	172.4171	.3919	.9234
PEMERG	114.7020	166.5850	.6027	.9207
PQUERIES	115.0468	170.8694	.5259	.9219
PSIGNAGE	114.6010	165.7663	.7097	.9195
PDIAGNOS	114.7709	167.7770	.5742	.9212
PMEDICIN	114.8350	166.6715	.5536	.9214
PGRIEVAN	115.1576	168.6418	.5658	.9213
PLIFT	114.6010	166.5466	.6412	.9203
PUNIFORM	114.4433	166.5733	.6492	.9202
PINDIVID	114.9261	171.5600	.3861	.9236
PPRICING	115.5591	166.0397	.4170	.9248
PQUALIFI	114.0837	170.0424	.5056	.9221
PINFECTI	115.1404	168.5012	.5285	.9218
PWASTE	115.1700	174.2155	.3039	.9244
PPERMISS	115.1601	171.1768	.4819	.9224
POPDTIME	114.6133	168.9686	.5243	.9218
PVENDOR	115.1207	170.2496	.5575	.9216

Reliability Coefficients 32 items

Alpha = .9243 Standardized item alpha = .9254

3.11.2 Demographic Profile of the Sample

Table 3.4 depicts the demographic characteristics of the overall sample for the Corporate Hospitals comprising of 406 respondents in total.

The sample is almost perfectly balanced in terms of Gender and inpatients/outpatients although there is a minor skew of 3% towards outpatients. The gender representation from urban populace is equally divided while females form less than 34 percent of the rural sample. Likewise less than 34 percent of rural sample were inpatients.

The sample is predominantly Urban (87.4 percent). Illiterates form the smallest mass and surprisingly the data is not too much skewed against the rural areas. The rural representation being miniscule not much meaning can be drawn from the sample, although the rural representation in the corporate hospitals may itself be very small indeed. Almost 30 percent patients from the rural areas were undergraduates while other 40 percent were Secondary school qualified. In case of the urban respondents more than 40 percent were undergraduates, 23 percent were with secondary education, and more than 20 percent were Postgraduates. .

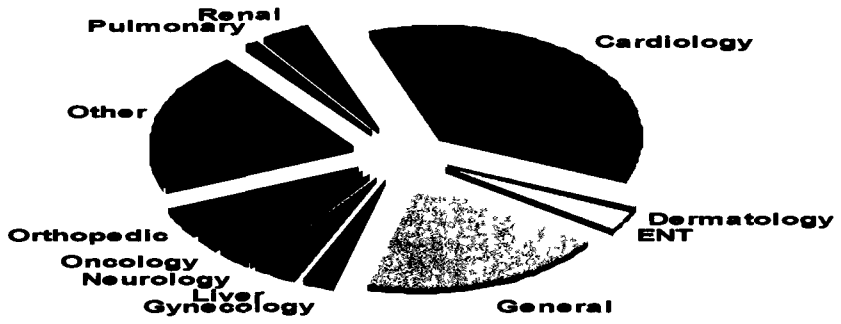
More than 72 percent Fortis Jessa Ram Hospital sample patients were females and hence homemakers formed the largest mass. In the other hospitals the proportion was rather even. The attendance of Service class people was rather even across the hospitals.

67 percent of females were homemakers while 50 percent of males were in service. 25 percent of the males were in business. Higher percentage of females was suffering from general, other, neurological and ENT ailments. The males were suffering more frequently with Cardiological, liver and orthopedic ailments. While Escorts Hospital, Indraprastha Apollo Hospital and Max Devki Devi Hospital had majority of Inpatients in case of Modi Hospital, Fortis Jessa Ram

Hospital and Pushpawati Singhania Hospital the converse has been true. The rural attendance was the highest at Indraprastha Apollo Hospital. On the contrary the urban representation was the highest at Max Devki Devi Hospital.

The Hospitals attracted most patients from their respective super specializations, e.g., Escorts, Max and Apollo for Cardiology; Pushpawati for Renal, hepatic and Stomach; and Fortis, Modi for General patients (mostly outpatients). More than 60 percent inpatients were cardiology cases while majority of outpatients were from general or other ailments.

Figure 3.1: Hospital Specialties Breakup



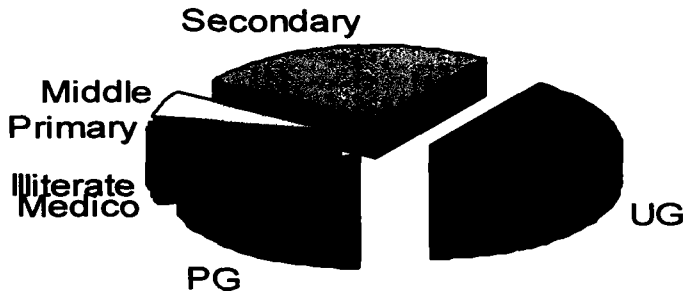
As shown in Figure 3.1 above the frequency of patients in Cardiology, other and general departments is the highest, in the given order, respectively. The major constituents of "others" are Stomach problems, brain fever, prostate and hernia etc. The General patients are represented by the ones for diagnostics, pregnancy, medicine etc.

The Figure 3.2 below demonstrates the frequencies of the Income level of various respondents. The predominant number is from the income level Rs. 5100

to 20000. The numbers descend successively from 5100-10000, 10100-15000 to 15100-2000. The sample therefore is more represented by the middle class as is believed to be the case for the corporate hospitals.

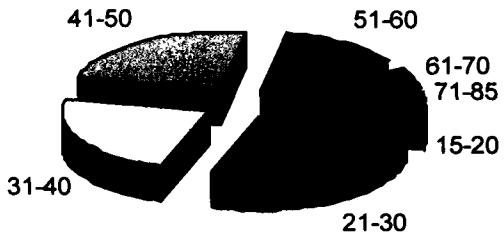
Figure 3.2: Income Level Frequencies

Figure 3.3: Education Level Frequencies



The study of the education level of the respondents reveals that the group is led by Undergraduates, Secondary school pass outs and Postgraduates respectively while the illiterates form the smallest group of less than 2.5%. Medicos form 3% of the group while the middle school pass outs form 5.7% of the group.

Figure 3.4: Age Profiling



The Figure 3.4 profiles the age of the patients. The age group 21-30 (young people) leads and is followed by you the age group 41-50, which in turn is very closely followed by 31-40 years of age people (middle aged).

Table 3.4: Demographic Profile of the Sample

Gender, Education and Demographic Area

Demographics		**Frequency**
Parameter	Details	Percentage in Brackets
Gender	Male	204 (50.2%)
	Female	202 (49.8%)
	Total	*406 (100.0%)*
Education Level	Illiterate	10 (2.5%)
	Primary	12 (3.0%)
	Middle	23 (5.7%)
	Secondary	105 (25.9%)
	UG	164 (40.4%)
	PG	80 (19.7%)
	Medico	12 (3.0%)
	Total	*406 (100.0%)*
Demographic Area	Urban	355 (87.4%)
	Rural	51 (12.6%)
	Total	*406 (100.0%)*

(table continues)

Income, Patients, Hospital and Profession Stack up

Income	Not Mentioned	4 (1.0%)
	100-5000	33 (8.1%)
	5100-10000	135 (33.2%)
	10100-15000	116 (28.6%)
	15100-20000	62 (15.3%)
	20100-25000	33 (8.1%)
	25100-30000	12 (3.0%)
	30100-40000	9 (2.2%)
	50000	2 (0.5%)
	Total	*406 (100.0%)*
Patients	Inpatients	190 (46.8%)
	Outpatients	216 (53.2%)
	Total	*406 (100.0%)*
Hospital	Indraprastha Apollo	79 (19.5%)
	Escorts Heart	81 (20.0%)
	Fortis Jessa Ram	83 (20.5%)
	Max Devki Devi	76 (18.7%)
	Modi Hospital	40 (19.9%)
	Pushpawati Singhania	45 (11.1%)
	Tata Hospital	2 (0.5%)
	Total	*406 (100.0%)*
Profession	Agriculture	19 (4.7%)
	Business	59 (14.5%)
	Homemaker	134 (33.0%)
	Retired	25 (6.2%)
	Service	145 (35.7%)
	Student	24 (5.9%)
	Total	*406 (100.0%)*

(table continues)

Department and Age profiles

Department	Cardiology	150 (36.9%)
	Dermatology	1 (0.2%)
	ENT	12 (3.0%)
	General	80 (19.7%)
	Gynecology	10 (2.5%)
	Liver	13 (3.2%)
	Neurology	12 (3.0%)
	Oncology	8 (2.0%)
	Orthopedic	16 (3.9%)
	Other	84 (20.7%)
	Pulmonary	4 (1.0%)
	Renal	16 (3.9%)
	Total	*406 (100.0%)*
Age	11-15	1 (0.2%)
	16-20	10 (2.5%)
	21-25	42 (10.4%)
	26-30	73 (17.9%)
	31-35	56 (13.8%)
	36-40	32 (7.9%)
	41-45	44 (10.8%)
	46-50	56 (13.8%)
	51-55	22 (5.5%)
	56-60	35 (8.6%)
	61-65	14 (3.4%)
	66-70	11 (2.7%)
	71-75	6 (1.5%)
	76-80	2 (0.5%)
	81-85	2 (0.5%)
	Total	*406 (100.0%)*

3.11.3 Pearson Correlation Coefficient Matrices

Some degree of multicollinearity [The situation in which two or more predictors (or subsets of predictors) are strongly (but not perfectly) correlated to one other, making it difficult to interpret the strength of the effect of each predictor (or predictor subset). For example, it would be hard to detect a gene if its effect is 'absorbed' (or masked) by combinations of genetic background action/interaction parameters in the model)] is desirable in factor analysis since the objective is to identify interrelated sets of variables. Moderate to moderate-high intercorrelations without multicollinearity are not mathematically required, but applying factor analysis to a correlation matrix with only low intercorrelations will require for solution nearly as many principal components as there are original variables, thereby defeating the data reduction purposes of factor analysis. On the other hand, too high intercorrelations may indicate a multicollinearity problem and colinear terms should be combined or otherwise eliminated prior to factor analysis. KMO statistics may be used to address multicollinearity in a factor analysis. http://www2.chass.ncsu.edu/garson/pa765/factor.htm

Measured by the Kaiser-Meyer-Olkin (KMO) statistics, sampling adequacy predicts if data are likely to factor well, based on correlation and partial correlation. KMO can be used in the present times to assess which variables to drop from the model because they are too multicollinear.

There is a KMO statistic for each individual variable, and their sum is the KMO overall statistic. KMO varies from 0 to 1.0 and KMO overall should be .60 or higher to proceed with factor analysis. If it is not, drop the indicator variables with the lowest individual KMO statistic values, until KMO overall rises above .60. http://www2.chass.ncsu.edu/garson/pa765/factor.htm#kmo

If visual inspection of correlation matrix reveals substantial number of correlations greater than .30, then factor analysis is appropriate (Hair, Anderson, Tatham, and Black, 1998).

Table 3.5: Pearson Correlation Matrix for Factor 1 (Responsiveness)

FACTOR 1 RESPONSIVENESS		CASHIER	PHYSICAL	ETHICAL	CREDIT C	QUERIES	MEDICINE	INDIVIDUA	PRICING
CASHIER	Pearson Correlation	1							
PHYSICAL	Pearson Correlation	.355							
ETHICAL	Pearson Correlation	.439	.279						
CREDIT C	Pearson Correlation	.372	.385	.340					
QUERIES	Pearson Correlation	.296	.378	.310	.372				
MEDICINE	Pearson Correlation	.360	.279	.310	.307	.325			
INDIVIDUA	Pearson Correlation	.421	.373	.404	.272	.400	.470		
PRICING	Pearson Correlation	.377	.185	.462	.377	.327	.339	.450	
WASTE	Pearson Correlation	.386	.437	.276	.468	.498	.412	.428	.353

N=406

All Correlations are significant at the 0.01 level (2-tailed).

Table 3.6: Pearson Correlation Matrix for Factor 2 (Assurance)

FACTOR 2 ASSURANCE		NURSING	WATER	CANTEEN	TELEPHON	SIGNAGES	LIFT	PERMISSI
NURSING	Pearson Correlation	1						
WATER	Pearson Correlation	.417						
CANTEEN	Pearson Correlation	.343	.444					
TELEPHON	Pearson Correlation	.225	.339	.326				
SIGNAGES	Pearson Correlation	.416	.430	.371	.269			
LIFT	Pearson Correlation	.271	.352	.329	.151	.602		
PERMISSI	Pearson Correlation	.429	.373	.432	.100	.387	.347	1

N=406

All Correlations are significant at the 0.01 level except the shaded one at 0.05 (2-tailed).

Table 3.7: Pearson Correlation Matrix for Factor 3 (Empathy)

FACTOR 3 EMPATHY		HYGIENE	SYMPATHY	UNIFORM	OPDTIME
HYGIENE	Pearson Correlation	1			
SYMPATHY	Pearson Correlation	.469			
UNIFORM	Pearson Correlation	.289	.372		
OPDTIME	Pearson Correlation	.263	.378	.322	1

N=406

All Correlations are significant at the 0.01 level (2-tailed).

Table 3.8: Pearson Correlation Matrix for Factor 4 (Tangibility)

FACTOR 4 TANGIBILITY		QUEUE	EQUIPMEN
QUEUE	Pearson Correlation	1	
EQUIPMEN	Pearson Correlation	.395	1

N=406

All Correlations are significant at the 0.01 level (2-tailed).

Table 3.9: Pearson Correlation Matrix for Factor 5 (Reliability)

FACTOR 5 RELIABILITY		EMERGENC	QUALIFIE
EMERGENC	Pearson Correlation	1	
QUALIFIE	Pearson Correlation	.360	1

N=406

All Correlations are significant at the 0.01 level (2-tailed).

Table 3.10: Pearson Correlation Matrix for Factor 6 (Convenience)

FACTOR 6 CONVENIENCE		LOCATION	PHONE	RECEPTIO
LOCATION	Pearson Correlation	1		
PHONE	Pearson Correlation	.204		
RECEPTIO	Pearson Correlation	.221	.465	1

N=406

All Correlations are significant at the 0.01 level (2-tailed).

The correlation coefficients in the above tables are all in the significant zone at 99% confidence level and hence ready for Factor analysis and such further studies. We also observe here that most of the correlations are above 0.300, the Factor Analysis is in order.

We continue the detailed analysis of data through the next chapter.

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CHAPTER IV

CUSTOMER RELATIONSHIPS ANALYSIS

4.1 Introduction

This chapter analyses the research data. The data is first processed with Factor analysis and thereafter is analyzed through Cronbach Alpha, Bartlett's test of sphericity, design and the procedures for conducting the study. Specifically, this chapter describes the instrument development including pilot testing and the sampling, data collection, and data analysis procedures.

4.2 Factor Analysis: Expectations and Perceptions Analysis

4.2.1 Expectation Scale

The exploratory factor analysis with principal components was conducted, after ascertaining above the data suitability to do so, to determine the dimensions of the expectations of the patients from the corporate hospitals and characteristic measures thereof. This analysis includes preliminary tests to determine the appropriateness of factor analysis: Bartlett's test of sphericity, and the Kaiser-Meyer-Olkin measure of sampling adequacy (MSA). Bartlett's test of sphericity is a statistical test for the presence of correlations among variables. It provides the statistical probability that the correlation matrix has significant correlations among at least some of variables. Thus, a significant Bartlett's test of sphericity is required (Hair, Anderson, Tatham, and Black, 1998). The Kaiser-Meyer-Olkin measure of sampling adequacy index, which can range from 0 to 1, indicates the

degree to which each variable in a set is predicted without error by the other variables. If the MSA index reaches 1, each variable is perfectly predicted by the other variables without error. According to Hair, Anderson, Tatham, and Black, (1998), a value of 0.50 or more from the Kaiser-Meyer-Olkin MSA test indicates that the data are adequate for exploratory factor analysis.

The Kaiser-Meyer-Olkin measure of sampling adequacy test ($\geq$ 0.50) and Bartlett's test of sphericity ($p<0.001$) indicate that the data were appropriate for factor analysis. Given these results, the exploratory factor analysis was conducted.

The exploratory factor analysis employed a principal component analysis with varimax rotation. Factors with Eigen values greater than 1.0 and rotated factor loadings of 0.50 or greater were retained. Despite the fact that, with a sample size greater than 350, a factor loading of 0.30 can be considered significant in this research; Hair, Anderson, Tatham, and Black, (1998) suggest that factor loadings of 0.50 or greater are practically significant. To ensure that each factor identified by the exploratory factor analysis would have only one dimension and that each attribute would load on only one factor, items with factor loadings less than 0.50 and any item loading on more than one factor with a loading score equal to or greater than 0.40 on each factor were eliminated from the analysis (Chen & Hsu, 2001; Kim, 2002). In addition, because the communality of a variable represents the amount of variance in the factor solution explained by that variable (Hair, Anderson, Tatham, and Black, 1998), variables with communalities less than 0.40 were deleted for reasons of insufficient contribution to explaining the variance. In the end, five variables that did not meet the above criteria were excluded from the analysis, and the factor model was redrawn by deriving a new factor solution with those five variables eliminated. The five variables deleted were "The waiting lounge should be aesthetically and functionally proper."; "The diagnostic services should be reliable and timely."; "Grievance redress system should be in place and functional."; "Infectious

diseases section should be separate and clearly identified."; "and", "All the customers and vendors should be treated fairly and ethically".

After deletion of the five items, the computation of Cronbach's alpha resulted in an alpha value of 0.8838 for the redrawn scale. The Kaiser-Meyer-Olkin measure of sampling adequacy test (0.856) and Bartlett's test of sphericity (p=.000) indicated that these data were also appropriate for factor analysis. A new factor *solution, derived by principal component factor analysis with varimax rotation*, indicated that 56.2 percent of the total variance was explained by six customer expectation factors (see Table 4.1).

Factor 1 consists of nine items, which have a Cronbach's alpha coefficient of 0.8361 for this construct and explain 14.655 percent of the variance in this construct. Factor 2 consists of seven items, which have a Cronbach's alpha coefficient of 0.7820 and explain 12.175 percent of the variance. Factor 3 consists of four items, which have a Cronbach's alpha coefficient of 0.6654 and explain 8.978 percent of the variance. The two items in Factor 4 have an alpha coefficient 0.5634 and explain 7.460 percent of the variance. The two items in Factor 5 present an alpha coefficient of 0.5296 and explain 6.862 percent of the variance. Factor 6 includes three items, having an alpha coefficient of 0.5646 and explaining 6.043 percent of the variance. Cronbach's alpha coefficient of 0.50, which is the lowest limit of acceptability, was used for the minimum reliability estimate because of the exploratory nature of this research. All the reorganized data loadings were accepted on this second iteration so as not to lose any further items. Only three items were below 0.500 factor loading with the minimum being close to 0.450. All other measures were satisfied by the three items.

After the factor analysis was completed, the five factors were named based on the major characteristics of the measured variables (see Table 4.2); these names can be compared to those in previous SERVQUAL studies (Parasuraman, Zeithaml, and Berry 1986, 1988).

Table 4.1: Expectation Factor Analysis - Initial

Rotated Component Matrix

	Component							
Variables	1	2	3	4	5	6	7	8
VAR0000	.401	-3.1E-02	.240	-3.1E-02	-.215	7.80E-02		.122
VAR0000	.77E-02	.448	-1.7E-02	.196	.293	7.95E-02		.126
VAR0000	.191	.106	7.80E-02	.203	.240	.173		-5.6E-02
VAR0000	-4.0E-03	.452	.185	9.60E-02		3.30E-02	.250	9.43E-02
VAR0000	.105	.146	.106	.103		1.04E-04	5.27E-02	-2.7E-02
VAR0000	6.51E-02	5.32E-02		3.68E-02	.320	.180	.153	.103
VAR0000	.218	.160		.159	.87E-02	4.37E-03	4.94E-02	.153
VAR0000	-9.5E-03	.397	.453	.134	.213	9.28E-02	.213	5.23E-02
VAR0000		-4.2E-02	.301	4.04E-02	-1.3E-02	.175	.206	-.123
VAR0001		5.71E-02	.189	-.128	.499	.142	6.34E-02	.148
VAR0001		2.39E-02	6.16E-02	.222	.07E-02	-4.0E-02	.258	-.406
VAR0001	.118		.265	6.23E-02	-1.2E-02	.155	.170	2.52E-02
VAR0001	-.132	.367	.346	.273	.235		3.41E-02	-.159
VAR0001	.113	.465	.51E-02	.147	3.36E-02		.125	3.97E-02
VAR0001	.243	3.00E-02	9.91E-02	-3.6E-02	3.52E-02		3.95E-02	.153
VAR0001		.365	-3.8E-03	-7.8E-02	3.95E-02	-3.3E-02	4.63E-02	.33E-02
VAR0001	.108	4.81E-02	.136		.194	1.70E-02	5.64E-02	.172
VAR0001		.253	-3.0E-02	.207	.250	-3.6E-02	-2.7E-02	.74E-03
VAR0001	.126		9.16E-02	.229	.237	.193	-2.0E-02	.385
VAR0002	.308	.10E-02	.114	.498	.320	.262	.176	.153
VAR0002		-3.1E-02	.143	.226	3.85E-02	.192	-3.8E-02	.248
VAR0002	.278	.308	-.141	.346	.264	.262	3.24E-02	.210
VAR0002	-.108		.237	.211	.204	5.57E-02	-.122	.444
VAR0002	6.39E-02	.133	.334	.224	-5.4E-02	.116	.163	
VAR0002		-.161	3.93E-02	9.92E-02	6.90E-02	5.60E-02	4.84E-02	-1.8E-04
VAR0002		.102	7.85E-02	.370	-.219	.168	-2.6E-02	-.219
VAR0002	.132	.137	.399		-.148	3.04E-04	.262	-4.6E-02
VAR0002	.200	.292	.177	.404	-8.6E-02	.413	.155	.126
VAR0002		.291	-4.3E-03	-1.9E-02	.101	.161	.174	.260
VAR0003	.129		6.59E-02	-2.9E-02	.144	5.67E-02	2.76E-02	.12E-02
VAR0003	.128	.187		.320	6.72E-02	.115	-.301	.111
VAR0003	7.37E-02	.411	.104	.340	.375	.283	-.170	-.165

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 10 iterations.

Table 4.2: Expectation Factor Analysis - Final

Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
VAR00001	.355	2.239E-02	.226	-.186	2.690E-02	
VAR00002	2.838E-02	.436	6.512E-02	.461	2.672E-02	
VAR00003	.177	.194	3.660E-02	.286	.190	
VAR00004	2.295E-02	.370	.201		2.221E-02	.169
VAR00005	.130	.119	4.960E-02		.159	-2.536E-02
VAR00006	3.896E-02	8.001E-02		.290	.161	.272
VAR00007	.195	9.160E-02		9.093E-02	.334	.121
VAR00009		-1.155E-02	.151	-5.772E-02	.169	.321
VAR00010		7.691E-02	.278	.394	-.169	.106
VAR00011		-1.925E-02	-.252	7.624E-02	.379	.296
VAR00012	9.611E-02		.167	.163	.140	.180
VAR00013	-8.904E-02		.147	.128	.413	8.943E-02
VAR00014	.158		4.007E-02	-3.307E-02	9.485E-02	.139
VAR00015	.298		.214	-.221	6.744E-03	.207
VAR00016		.210	5.113E-03	.170	-9.546E-02	7.675E-02
VAR00017	.121	.111	.282	.250		-1.253E-02
VAR00018		.160	-1.779E-02	.324	.135	-8.544E-02
VAR00019	.156		.327	.256	4.347E-02	-9.928E-02
VAR00021		.116	.296	-5.677E-02	.165	-1.322E-02
VAR00023	-7.021E-02		.467	.261	5.061E-02	-.211
VAR00024	6.821E-02	.260		-5.341E-02	2.227E-02	.112
VAR00025		-9.025E-02	2.773E-02	-4.217E-02	.130	7.428E-02
VAR00026		.143	-9.286E-02	-.157	.482	2.773E-02
VAR00027	9.576E-02	.135	.246	2.094E-02		.255
VAR00029		.299	.164	.160	-.135	.143
VAR00030	.148		-4.085E-03	.307	-3.143E-02	-4.655E-02
VAR00031	.144	.186		.115	.395	-.260

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

Table 4.3: Factor Analysis Results: Expectation Factor Constructs

Expectation Factor Constructs	Item	Eigen Value	Factor Loading	Variance Explained (%)	Cronbach Alpha and Kaiser-Meyer-Olkin MSA
Item Total (27 items) :Bartlett's Test of Sphericity .000				56.173	0.8838/ 0.856
Responsiveness *(Factor 1)*	Individual Attention	3.957	0.745	14.655	0.8361/ 0.875
	Waste disposal		0.689		
	Credit Card facility		0.63		
	Queries answer		0.626		
	Cashier Prompt		0.601		
	Pricing clear and reasonable		0.601		
	Medicine Store service		0.597		
	Doctors Ethical		0.557		
	Physical Appeal		0.551		
Assurance *(Factor 2)*	Canteen and Parking	3.287	0.736	12.175	0.7820/ 0.805
	Permission from Guardian		0.665		
	Water availability		0.625		
	Signage and lighting		0.616		
	Nursing standards		0.583		
	Lift and staircase		0.517		
	Telephone facilities		0.441		
Empathy *(Factor 3)*	Uniform of Staff	2.424	0.721	8.978	0.6654/ 0.712
	Sympathy and Punctuality		0.64		
	Hygiene and cleanliness		0.573		
	OPD Timings convenient		0.465		
Tangibility *(Factor 4)*	Queue Management	2.014	0.658	7.460	0.5634/ 0.500
	Equipment State of Art		0.637		
Reliability *(Factor 5)*	Qualified, trained Docs- staff	1.853	0.680	6.862	0.5296/ 0.500
	Emergency round the clock		0.553		

(Table continues)

Table 4.3 (contd.): Factor Analysis Results: Expectation Factor Constructs

Expectation Factor Constructs	Item	Eigen Value	Factor Loading	Variance Explained (%)	Cronbach Alpha and Kaiser-Meyer-Olkin MSA
Convenience ***(Factor 6)***	Reception guidance services	1.632	0.624	6.043	0.5646/ 0.573
	Location of Hospital		0.584		
	Phone enquiries handling		0.487		

Factor 1, identified as *Responsiveness*, includes items individual attention to the patients, effective medical waste disposal systems, credit card facility, effective queries handling by the hospital staff and doctors, reasonable and ethical pricing, good and fast cashier services and ethical behavior on part of the doctors. While most of the factors can be identified as responsiveness some can not be as per the standard conventions. This is primarily indicative of expectations on part of the patients.

Factor 2, named *Assurance,* includes items on canteen and the parking services, permission from guardian before undertaking a major medical procedure, free and easily accessible drinking water facilities at the hospital, and good and efficient lighting as also the signage system for easy directions to the patients. The patients are weak on the sentimental and physical quotient and assurance plays a major role in smoothening.

Factor 3, named *Empathy,* comprises such items as clearly identifiable uniforms and sympathetic handling of patients. Empathy is a very major attribute of the SERVQUAL questionnaire and the utility is even more pronounced in the healthcare field.

Factor 4, named *Tangibility,* includes items on the state of the art and least invasive equipment availability with the hospitals and the professional

queue management systems present. In the service sector it is extremely important to introduce the tangible factors into the whole experience to supplement the soft attributes. This is an integral part of SERVQUAL.

Factor 5, named *Reliability*, is an improvised concept of quality as an experience and devoid of subjectivity. It has two items on the qualifications and training of the doctors and nurses, and the presence of round the *clock emergency services not only on the announcement boards but also* in essence. This too is an attribute of the SERVQUAL.

Factor 6 is named *Convenience*. The three items in this attribute are the effective reception services for quick navigational and other guidance of the patients, easy location of the hospital with fast access and phone services to help the already hassled patients and their attendants. This is the only factor which is beyond the SERVQUAL (since SRRVQUAL defines only five) defined factor names and was so defined on account of the attributes carried therein.

The KMO Measures, Cronbach alpha measures, Bartlett's Test of Sphericity measures, communalities, rotated factor loadings and the correlation coefficients demonstrate beyond doubt the validity of these factors.

4.2.2 Perception Scale

The same procedure was followed for the perception scale. Two runs were required as had been the case with the expectations scale. The results are given below in Table 4.4 and Table 4.5. The factor analysis yielded different results than the expectation scale, mainly in terms of the following:

- The variables to move out were seven as compared to five.

- The variables that moved out were quite different in that the only common variable to move out was about the diagnostic facilities. The other variables moving out were from different factors of the expectation scale and hence the factor structure was substantially different.
- Seven factors were discovered as compared to six in the expectation scale and hence the clusters were more uniformly sized yet fractured.
- The seventh factor is hanging in balance with just one variable in it.
- The structure of the factors was also different in terms of both the number of variables as also the attributes.
- The factors represent slightly more than 60 percent of data as against 56% in case of the expectation scale.
- The Kaiser-Meyer-Olkin measure of sampling adequacy was found to be 0.884 as compared to the overall figure of 0.856 for expectation scale. Although the difference is not very major the data is even more suited to Factor analysis.
- The Bartlett's test of sphericity led to similar result of 0.000 significance. The Cronbach Alpha in case of the perception scale is 0.8970 as compared to 0.8838 for the expectation scale and hence the data is again more factorable.
- In the final rotated component matrix four factor loadings were lower than 0.500 as compared to three for the expectation scale.
- The Eigen values subsequent upon rotation were found lower starting from a maximum of 3.024 as against 3.957 while the minimum was 1.570 against 1.632.
- The number of iterations for the rotation to the final result was just the same at eleven, while twelve iterations were required for the initial solution against the ten.

This leads us to the conclusion that the perception response pattern was different than the expectations pattern.

Table 4.4: Perception Factor Analysis - Initial

Rotated Component Matrix

	Component							
	1	2	3	4	5	6	7	8
PLOCATI	.490	.510E-02	.877E-02	.702E-02	.055E-02	.156	[illegible]	.199
PPHONE	.422	.368	.396E-02	.879E-02	.218	.356E-02	.244	.311
PRECEP	[illegible]	.149	.313E-02	.408E-02	.956E-02	.456	.114E-02	.019E-02
PQUEUE	.381	.885E-02	.193	.399	[illegible]	.371E-02	.236	.913E-02
PEQUIP	.399E-02	.182	.724E-02	.142	[illegible]	.101	.165E-02	.236
PHYGIEN	.225	.349	.114	[illegible]	.173	.143	.114	.366E-02
PSYMPA	.295	.858E-02	.171	[illegible]	.130	.432	.148	.883E-02
PAESTHE	.211	.328	.124	[illegible]	.950E-02	.161	.138	.187
PCASHIE	.812E-02	.205	.425E-02	.150	.732E-02	[illegible]	.285	.377E-02
PPHYSIC	.574E-02	.221	-.111	.130E-03	[illegible]	.339	.389	.681E-02
PETHICA	.102E-02	.176	.728E-02	.960E-02	.116	[illegible]	-.188	.018E-02
PNURSIN	.191	.137E-02	[illegible]	.237	.186E-03	.437	.112	.131
PWATER	.209	.161	[illegible]	.177	-.218	.137	.234	.126
PCANTEE	.120	.033E-02	.153	.139	.139	.423E-03	.838E-02	[illegible]
PTELEPH	.116	.270E-02	.417	.438	.328	.165E-02	.142	.317
PCREDIT	.787E-02	.366	.387	-.342	.200	.304	.105E-02	.333
PEMERG	.470	.174	.204	.305	.209	-.170	.249	.215
PQUERIE	.970E-02	[illegible]	.152	.213	.198	.235	.100	.188E-02
PSIGNAG	.399	.376	.361	.135	.336	.265E-04	.156	.250
PDIAGNO	.190	.372	.994E-02	.202	.181	.236	.260	.285
PMEDICI	.159	[illegible]	.137	.475	.886E-02	.108	.358E-02	.174
PGRIEVA	.101	[illegible]	.256	.149	.206	.815E-02	.233	.772E-02
PLIFT	.468	.326	.326	.199	.139	-.135	.246	.171
PUNIFOR	[illegible]	.320	.162	.289	.141E-02	.914E-02	.215	.630E-02
PINDIVID	.188	[illegible]	.124E-02	.341E-03	.014E-02	.315	.119E-02	-.118
PPRICIN	.173E-02	.123	.142	.161	.295	-.171	[illegible]	.300
PQUALIF	[illegible]	.142	.338E-02	.255	.384E-02	.131	.439E-02	.589E-02
PINFECT	.226	.130	[illegible]	.430E-02	.151	.884E-02	.180	.233
PWASTE	.478E-02	.297	[illegible]	.700E-02	.187	.416E-02	.948E-02	-.349
PPERMIS	.124	.176	.189	.101	.173	.675E-02	[illegible]	-.113
POPDTIM	[illegible]	.533E-02	.291	.951E-02	.171	.125	.108E-02	.428E-02
PVENDO	.457	.115	.222	.364E-02	[illegible]	.724E-02	.965E-02	.043E-02

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Table 4.5: Perception Factor Analysis - Final

Rotated Component Matrix

	Component						
	1	2	3	4	5	6	7
PLOCATI	623E-02	.478	.115	.664E-03		.827E-02	.163
PQUEUE	.133		.784E-03	.476	.167	.159	.138
PEQUIP	.215	.124	.043E-02		.580E-02	.038E-02	.205
PHYGIEN		.347	.123	.173	.965E-02	.105	.174
PSYMPA	.182		.386	.112	.797E-02	.119	.264
PAESTHE		.309	.186	.130E-02	.608E-02	.101	.380
PPHYSIC	.153	.467E-02	.382		.382	-.114	.598E-03
PETHICA	.180	.919E-02		.105	-.185	.682E-02	.689E-02
PNURSIN	760E-02	.276	.477	.270E-02	.104		.315
PQUERIE		.251E-02	.236	.189	.162	.513E-02	.661E-02
PMEDICI		.202	.108	.478E-02	.846E-02	.112	.208
PGRIEVA		.005E-02	.980E-02	.205	.354	.234	.695E-03
PUNIFOR	.397		.078E-02	.652E-02	.235	.124	.253E-02
PINDIVID		.116	.267	.599E-02	.177	.030E-02	-.325
PQUALIF	.271		.006E-02	.695E-02	.445E-02	.324E-02	.136E-03
PINFECT	.137	.235	.663E-02	.116	.265		.290
PPERMIS	.171	.161	.420E-02	.205		.141	.614E-02
POPDTIM	838E-02		.608E-02	.146	.144	.253	.894E-02
PVENDO	.146	.474	.216E-02		.134	.233	.445E-02
PRECEP	.129		.441	.950E-03	.146	.797E-02	-.164
PCASHIE	.224	.540E-02		.277E-02	.266	.310E-02	.552E-02
PWATER	.245	.222	.138	-.259	.361		.222
PCANTE	.132	.109	.567E-04	.147	.125	.991E-03	
PPRICIN	.153	.433E-02	-.107	.344		.898E-02	.387
PWASTE	.250	.333E-02	.969E-02	.163	.763E-02		-.250

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

4.3 Paired tests: Gender, Patients, and Hospitals Comparison

The data sought to be analyzed here primarily consists of situations referred to as before-after conditions. The data questions being the same, the difference only being pre experience expectations and post experience perceptions, and administered to the same sample in two parts the paired tests form the perfect template to an effective analysis. Since the data has been collected from a big sample of 406 respondents the analysis can be both parametric as also non parametric.

4.3.1 paired t-Test for the factor attributes

We have gone in for the parametric paired sample t-test since this is the ideal situation for the same. The t-test is most suited for the before-after kind of a situation. In this case the situation is expectations from the hospital and the perceptions of the hospital after getting experience of the services. The expectations vary from person to person and may be different from different hospitals from the same group of people.

We have focused our studies on the variables selected through the Factor Analysis of the Expectations and have tried to build up the comparisons for the same with reference to the perceptions too.

Our null hypothesis is:

H_0 = There is no difference between the expectations and the perceptions implying that the difference between the mean values of expectations and respective perceptions is zero.

Table 4.6: Paired Factors for Factor 1 to 3

Paired Samples Statistics

Pairs	Attributes	Mean	N	Standard Deviation	Std. Error Mean
Pair 1	CASHIER	4.05	406	.670	.033
	PCASHIER	3.55	406	.645	.032
Pair 2	PHYSICAL	3.87	406	.660	.033
	PPHYSICA	3.48	406	.676	.034
Pair 3	ETHICAL	4.43	406	.654	.032
	PETHICAL	3.94	406	.709	.035
Pair 4	CRED_CAR	4.00	406	.852	.042
	PCRED_CA	3.33	406	.701	.035
Pair 5	QUERIES	4.29	406	.682	.034
	PQUERIES	3.50	406	.643	.032
Pair 6	MEDICINE	4.49	406	.539	.027
	PMEDICIN	3.71	406	.886	.044
Pair 7	INDIVIDU	4.35	406	.732	.036
	PINDIVID	3.62	406	.786	.039
Pair 8	PRICING	4.31	406	.865	.043
	PPRICING	2.98	406	1.181	.059
Pair 9	WASTE	4.41	406	.786	.039
	PWASTE	3.37	406	.679	.034
Pair 10	NURSING	4.44	406	.628	.031
	PNURSING	3.95	406	.699	.035
Pair 11	WATER	4.33	406	.667	.033
	PWATER	3.66	406	.788	.039
Pair 12	CANTEEN	3.96	406	.625	.031
	PCANTEEN	3.36	406	.818	.041
Pair 13	TELEPHON	3.97	406	.684	.034
	PTELEPHO	3.38	406	.674	.033
Pair 14	SIGNAGES	4.41	406	.641	.032
	PSIGNAGE	3.94	406	.755	.037
Pair 15	LIFTS	4.32	406	.682	.034
	PLIFTS	3.94	406	.783	.039
Pair 16	PERMISSI	3.72	406	.940	.047
	PPERMISS	3.38	406	.674	.033
Pair 17	HYGIENE	4.74	406	.511	.025
	PHYGIENE	4.24	406	.863	.043
Pair 18	SYMPATHY	4.81	406	.430	.021
	PSYMPATH	4.19	406	.769	.038
Pair 19	UNIFORM	4.55	406	.605	.030
	PUNIFORM	4.10	406	.773	.038
Pair 20	OPD_TIME	4.56	406	.604	.030
	POPD_TIM	3.93	406	.774	.038

Table 4.7: Paired Factors for Factor 1 to 3 Significance

Paired Samples Test

Pairs	Expectations - Perceptions	Paired Differences		t	df	Sig. (2-tailed)
		Mean	Standard Deviation			
Pair 1	CASHIER – PCASHIER	.50	.782	12.888	405	.000
Pair 2	PHYSICAL – PPHYSICA	.39	.824	9.637	405	.000
Pair 3	ETHICAL – PETHICAL	.49	.733	13.344	405	.000
Pair 4	CRED_CAR – PCRED_CA	.67	.921	14.652	405	.000
Pair 5	QUERIES – PQUERIES	.80	.822	19.570	405	.000
Pair 6	MEDICINE – PMEDICIN	.79	.974	16.251	405	.000
Pair 7	INDIVIDU – PINDIVID	.74	.858	17.348	405	.000
Pair 8	PRICING – PPRICING	1.33	1.510	17.715	405	.000
Pair 9	WASTE – PWASTE	1.04	.871	24.041	405	.000
Pair 10	NURSING – PNURSING	.49	.726	13.604	405	.000
Pair 11	WATER – PWATER	.68	.774	17.629	405	.000
Pair 12	CANTEEN – PCANTEEN	.61	.893	13.672	405	.000
Pair 13	TELEPHON – PTELEPHO	.58	.799	14.651	405	.000
Pair 14	SIGNAGES – PSIGNAGE	.47	.725	13.067	405	.000
Pair 15	LIFTS – PLIFTS	.38	.670	11.414	405	.000
Pair 16	PERMISSI – PPERMISS	.34	.931	7.356	405	.000
Pair 17	HYGIENE – PHYGIENE	.50	.860	11.831	405	.000
Pair 18	SYMPATHY – PSYMPATH	.62	.791	15.805	405	.000
Pair 19	UNIFORM – PUNIFORM	.46	.799	11.488	405	.000
Pair 20	OPD_TIME – POPD_TIM	.63	.796	16.033	405	.000

4.3.1.1 Factor 1

Cashier: The difference between the means is 0.5 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. As we observe here the means difference between the expectations and perceptions is 0.5 implying that the expectations are belied in the cashier and billing services not being as prompt or proper as expected.

Physical: The difference between the means is 0.39 and this still leads to a sig. value of 0.000. For a value lower than 0.05, for 95% level of confidence, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for the physical appeal. This implies that the physical facilities are not as appealing as expected.

Ethical: The difference between the means is 0.49 and this still leads to a sig. value of 0.000. For a value lower than 0.05, for 95% level of confidence, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for the Doctors being dependable and ethical. This implies that the Doctors are not as ethical and dependable as expected. Yet, at the perception mean score of four (almost) the service is better matched with the expectations

Credit Card: The difference between the means is 0.67 and this leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for the availability and functionality of the credit card payment facilities. This

implies that the facilities are not as functional and available as expected. The dichotomy on the functionality is – even when the service is available, it may be functional or may not be, many times even intentional!

Queries: The difference between the means is 0.80 and this leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for "well responded queries to patients and attendants". This implies that the queries response to patients and attendants is not as per the expected levels. A difference in mean by 0.80 practically means almost a degree down from the expectation from between "strongly agree and agree" to between "agree and no opinion".

Medicine: The difference between the means is 0.79 and this leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for "medicine store facilities". This implies that the medical store location and service ethics as also the efficiency is not as per the expected levels. The difference is again almost a degree down from the expectation from between "strongly agree and agree" to between "agree and no opinion".

Individual: The difference between the means is 0.74 and this leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for "individual attention". This implies that the individual attention to the patients is not rendered on the expected lines.

Pricing: The difference between the means is 1.33, which is the highest between the selected variables, and this expectedly leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for "pricing". This implies that the "pricing is not as reasonable, clear and ethical as expected". The perceptions mean value goes just below even three meaning that it is on the poorer side of the Likert scale. The negative ranks on this attribute are very high. 246 respondents found the perceptions to be lower than the expectations.

Waste: The difference between the means is 1.04, which is one of the highest between the selected variables, and this expectedly leads to a sig. value of 0.000. For a value lower than 0.05, for 5% level of significance, **the null hypothesis is rejected** meaning that the expectations and perceptions are not same but significantly different for "Medical Waste disposal". This implies that the "Medical Waste disposal is not as per the standards as expected". The perceptions mean value goes just above the "no opinion" level. The negative ranks on this attribute are the highest. 265 respondents found the perceptions to be lower than the expectations.

Summing up the nine attributes of the Factor 1 the picture is not too great and the corporate hospitals need to do a lot to be the preferred destinations by choice.

4.3.1.2 Factor 2

Nursing: The difference between the means is 0.49 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different.

As we observe here the means difference between the expectations and perceptions is 0.49 implying that the expectations are belied in the nursing and support staff services not being of as standards as expected. Yet, at the perception mean score of four (almost) the service is better matched with the expectations and has lesser catching up to do.

Water: The difference between the means is 0.68 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. As we observe here the means difference between the expectations and perceptions is 0.68 implying that the expectations are belied in the availability of free drinking water. The service needs to be made more attendant and visitor friendly.

Canteen: The difference between the means is 0.61 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. As we observe here the means difference between the expectations and perceptions is 0.61 implying that the expectations are belied in the availability of good and professional canteen and the parking facilities. In the modern day this facility is very important, most importantly in metros, and needs to be worked on.

Telephone: The difference between the means is 0.58 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. We observe here that the means difference between the expectations and

perceptions implies that the expectations are belied in the easy and reasonably priced availability of telephone facilities.

Signage: The difference between the means is 0.47 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. We observe here that the means difference between the expectations and perceptions implies that the expectations are disproved in the functionality and properness of lighting and the direction signages. Yet, at the perception mean score of four (almost) the service is better matched with the expectations and has lesser gap with the expectation levels.

Lifts: The difference between the means is 0.38 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. We observe here that the means difference between the expectations and perceptions implies that the expectations are not met in the availability of proper lift and staircase facilities. Yet, at the perception mean score of four (almost) the service is better matched with the expectations and has lesser gap with the expectation levels.

Permission: The difference between the means is 0.34 and this leads to a sig. value of 0.000. For a value lower than 0.05, while considering 95% level of confidence, the **null hypothesis is rejected** meaning that the expectations and perceptions are not same but are significantly different. The means difference between the expectations and perceptions implies that the expectations are not met in seeking patient's/ his attendant's permission before the commencement of the medical procedures. The expectation score itself on this attribute is lower at 3.72 meaning that the

attribute is rather controversial in that while some people desire it to be so others do not.

Summing up the seven attributes of the Factor 2 the picture is not as gloomy as was the case in Factor 1. The corporate hospitals need to do just a little bit to be on the right side of the patients.

4.3.1.3 Factor 3

Factor 3 constitutes of the following attributes:

Hygiene: "General Hygiene and cleanliness is maintained"
Sympathy: "Doctors and staff attend to the patients in time and are sympathetic"
Uniform: "Clearly defined and neat uniforms are there to recognize the staff"
OPD Time: "OPD timings are convenient"

On all these attributes too the **null hypothesis is rejected.** The expectations are larger than the perceptions. The means differences in this case range from the highest 0.63 (OPD Timing) to the lowest 0.46 (Uniform). However, most of the scores, with the only exception of OPD Timing the perceptions score are well above four and the score is close to four even in the OPD Timing. This implies that the hospitals need to do a little more to delight the customers on these aspects.

4.3.1.4 Factor 4

Factor 4 constitutes of the following attributes:

Queue: "Queues and Patients management is professional"

Equipment: "The Hospital has least invasive state of the art equipment"

On these attributes too the **null hypothesis is rejected.** The expectations are larger than the perceptions. The means differences range from the low 0.32 (Equipment) to high 0.48 (Queues). However, these scores are not beyond the respective expectation scores. Therefore, the hospitals need to do just slightly more to get a much preferred status on these aspects.

4.3.1.5 Factor 5

Factor 5 constitutes of the following attributes:

Emergency: "Emergency Services are actually available round the clock"
Qualified: "The Doctors are well qualified and trained"

On these attributes too the **null hypothesis is rejected.** The expectations are larger than the perceptions. The means differences range from low 0.47 (Qualified) to high 0.92 (Emergency). However, the expectations score being close to five, these scores are not beyond the respective expectation scores. Therefore, the hospitals need to do slightly more, especially about the emergency department operations, to get truly customer centric on these aspects.

4.3.1.6 Factor 6

Factor 6 constitutes of the following attributes:

Location: "The Hospital is conveniently located"
Phone: "Phone enquiries are handled politely and satisfactorily"
Reception: "Reception services are helpful"

On all these attributes too the **null hypothesis is rejected.** The expectations are larger than the perceptions. The means differences for the Factor 6 are ranging from the lowest 0.31 (Reception) to the highest 0.55 (Location). However, the scores, being close to four the hospitals need to do slightly more to be most customer friendly.

To sum up all these factors, when all the Hospitals are considered together for the factors based on the Expectation scale Factor Analysis, Hospitals need to do **much more** on the Factor 1 with nine attributes. The status against the balance five factors is not all that dismal and the hospitals need to fine tune their systems and orientation to just bridge the gap and also exceed the customer expectations.

On an overall basis, assessing on the attribute level, the best performance is exhibited for the reception services, the state of equipment and permission prior to the procedures respectively with the gap being minimum between the expectations and perceptions. Exceeding the customer expectations here will enable the hospitals in delivering "Customer Delight".

The worst performance is exhibited in the attributes "pricing", "waste disposal" and "Emergency services" respectively. We take up the detailed analysis of the respective Hospitals' performance across the factors to identify the weak as also the strong spots.

This, in totality, implies that for all the variables the perception scores are less than the expectation scores to a varying degree. Hence the Hospitals have the task cut out for them to come good in facing the challenge else the medical tourism and domestic healthcare market will give it a short shrift and move over to the non corporate hospitals (presuming that they are as bad or as good but competitive on prices).

Table 4.8: Paired Factors for Factor 4 to 6

Paired Samples Statistics

Pairs	Attributes	Mean	N	Standard Deviation	Std. Error Mean
Pair 1	QUEUES	4.15	406	.705	.035
	PQUEUES	3.67	406	.743	.037
Pair 2	EQUIPMEN	3.87	406	.802	.040
	PEQUIPME	3.56	406	.706	.035
Pair 3	EMERGENC	4.76	406	.523	.026
	PEMERGEN	3.84	406	.826	.041
Pair 4	QUALIFIE	4.93	406	.297	.015
	PQUALIFI	4.46	406	.725	.036
Pair 5	LOCATION	4.62	406	.543	.027
	PLOCATIO	4.07	406	.715	.035
Pair 6	PHONE	4.13	406	.662	.033
	PPHONE	3.67	406	.784	.039
Pair 7	RECEPTIO	4.27	406	.595	.030
	PRECEPTI	3.96	406	.647	.032
Pair 8	AESTHETI	4.45	406	.641	.032
	PAESTHET	3.80	406	.920	.046
Pair 9	DIAGNOST	4.64	406	.615	.031
	PDIAGNOS	3.77	406	.788	.039
Pair 10	GRIEVANC	4.15	406	.712	.035
	PGRIEVAN	3.38	406	.744	.037
Pair 11	INFECTIO	4.77	406	.544	.027
	PINFECTI	3.40	406	.801	.040
Pair 12	VENDORS	4.07	406	.571	.028
	PVENDORS	3.42	406	.650	.032

Table 4.9: Paired Factors for Factor 4 to 6 Significance

Paired Samples Test

Pairs	Expectations - Perceptions	Paired Differences		t	df	Sig. (2-tailed)
		Mean	Standard Deviation			
Pair 1	QUEUES – PQUEUES	.48	.715	13.390	405	.000
Pair 2	EQUIPMEN – PEQUIPME	.32	.766	8.293	405	.000
Pair 3	EMERGENC – PEMERGEN	.92	.839	22.002	405	.000
Pair 4	QUALIFIE – PQUALIFI	.47	.712	13.251	405	.000
Pair 5	LOCATION – PLOCATIO	.55	.757	14.744	405	.000
Pair 6	PHONE – PPHONE	.45	.805	11.340	405	.000
Pair 7	RECEPTIO – PRECEPTI	.31	.776	7.926	405	.000
Pair 8	AESTHETI – PAESTHET	.65	.898	14.472	405	.000
Pair 9	DIAGNOST – PDIAGNOS	.87	.871	20.168	405	.000
Pair 10	GRIEVANC – PGRIEVAN	.76	.899	17.114	405	.000
Pair 11	INFECTIO – PINFECTI	1.37	.879	31.409	405	.000
Pair 12	VENDORS – PVENDORS	.65	.707	18.453	405	.000

4.3.2 t-test for strata studies

4.3.2.1 Gender Comparison

Male/Female

The responses between males and females are not significantly different. This is easily implied by the fact that zero is between the lower and upper level at the 95% confidence interval of the difference. This is also accentuated by the higher value of Sig. (2-tailed). Although, interestingly, the responses across the Factor pairs differ significantly except Factor 6 i.e., the responses between males and females are not significantly different against the *Convenience* factor. This non significant difference is almost a border line case for 95% degree of confidence. In case of 99% degree of confidence all the factor pairs except the pair 5 are not significantly different.

Table 4.10: Paired Difference for Gender

Paired Samples Test

Gender Comparison	Paired Differences				t	df	Sig. (2-tailed)
	Mean	Standard Deviation	95% Confidence Interval of the Difference				
			Lower	Upper			
FEMALE - MALE	-.01142	.038116	-.03563	.01280	-1.038	11	.322

The overall correlation between the responses from males and females is very close to unity (0.994) and hence the responses belong to the same group in the same direction. The groups are almost congruent to each other, to the extent that the observations by males can be forecast from the observations by the females.

Table 4.11: Paired Difference for Gender across Factors

Paired Samples Test

Pair	Expectations – Perceptions	Paired Differences					t	df	Sig. (2-tailed)
		Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.77250	.027577	.019500	.52473	1.02027	39.615	1	.016
Pair 2	VAR00003 - VAR00004	.52200	.029698	.021000	.25517	.78883	24.857	1	.026
Pair 3	VAR00005 - VAR00006	.55750	.024749	.017500	.33514	.77986	31.857	1	.020
Pair 4	VAR00007 - VAR00008	.45950	.043134	.030500	.07196	.84704	15.066	1	.042
Pair 5	VAR00009 - VAR00010	.69550	.000707	.000500	.68915	.70185	1391.000	1	.000
Pair 6	VAR00011 - VAR00012	.45050	.053033	.037500	-.02598	.92698	12.013	1	.053

4.3.2.2 Inpatient outpatient Comparison

Inpatient/ Outpatient

The responses between the inpatients and the outpatients are significantly different. This is easily implied by the fact that zero is not between the lower and upper level at the 95% confidence interval of the difference. This is also accentuated by the lowest value of Sig. (2-tailed), 0.000. Although, interestingly, the responses across the Factor pairs do not differ significantly for Factor 3, 5 and 6 i.e., the responses between inpatients and outpatients are not significantly different against the *Empathy, Reliability and Convenience* factors. This non significant difference is valid for 95% degree of confidence. In case of 99% degree of confidence all the factor pairs are not significantly different.

Table 4.12: Paired Difference for Patients

Paired Samples Test

Patients	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
INPATIEN - OUTPATIE	.12492	.073666	.021265	.07811	.17172	5.874	11	.000

The overall correlation between the responses from inpatients and outpatients is very close to unity (0.994) and hence the responses belong to the same group in the same direction. The groups are almost congruent to each other, to the extent that the observations by inpatients can be forecast from the observations by the outpatients.

Table 4.13: Paired Difference for Patients across Factors

Paired Samples Test

Pair	Expectations – Perceptions	Paired Differences					t	df	Sig. (2-tailed)
		Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.77400	.070711	.050000	.13869	1.40931	15.480	1	.041
Pair 2	VAR00003 - VAR00004	.46750	.045962	.032500	.05455	.88045	14.385	1	.044
Pair 3	VAR00005 - VAR00006	.55250	.123744	.087500	-.55929	1.66429	6.314	1	.100
Pair 4	VAR00007 - VAR00008	.45800	.043841	.031000	.06411	.85189	14.774	1	.043
Pair 5	VAR00009 - VAR00010	.69000	.124451	.088000	-.42815	1.80815	7.841	1	.081
Pair 6	VAR00011 - VAR00012	.44750	.074246	.052500	-.21958	1.11458	8.524	1	.074

4.3.2.3 Hospital Comparison

Hospitals

The responses across the hospital patients are significantly different across all the Factor pairs, not only for the 99% level of confidence but also for 95% level of confidence.

Table 4.14: Paired Difference for Hospitals across Factors

Paired Samples Test

Pairs	Pair Names	Paired Differences					t	df	Sig. (2-tailed)
		Mean	Standard Deviation	Standard Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	F1E - F1P	.78133	.121839	.049740	.65347	.90920	15.708	5	.000
Pair 2	F2E - F2P	.53167	.143529	.058596	.38104	.68229	9.073	5	.000
Pair 3	F3E - F3P	.57200	.214763	.087677	.34662	.79738	6.524	5	.001
Pair 4	F4E - F4P	.45867	.149890	.061192	.30137	.61597	7.495	5	.001
Pair 5	F5E - F5P	.73017	.208862	.085268	.51098	.94935	8.563	5	.000
Pair 6	F6E - F6P	.47050	.114950	.046928	.34987	.59113	10.026	5	.000

Table 4.14(contd.): Paired Correlations for Hospitals across Factors

Pairs	Pair Names	N	Correlation	Sig.
Pair 1	F1E & F1P	6	.691	.128
Pair 2	F2E & F2P	6	.442	.380
Pair 3	F3E & F3P	6	.569	.238
Pair 4	F4E & F4P	6	.763	.077
Pair 5	F5E & F5P	6	-.126	.812
Pair 6	F6E & F6P	6	.454	.366

The overall correlation between the responses is not significant. The correlation as shown above ranges from the minimum value of -0.126 for pair 5 to a maximum of 0.763 for Pair 4. These correlations are not significant at 95% level of confidence.

4.3.3 ANOVA for strata studies

4.3.3.1 Hospitals comparison

The data responses across the different hospitals are not significantly different as is sufficiently implied by the F-test and the probability value, as given below in Table 4.15.

Table 4.15: ANOVA between Hospitals

ANOVA: Results

Source of Variation	*Sum of Squares*	*d.f.*	*Mean Squares*	*F*
between	*0.7789*	*5*	*0.1558*	*0.8579*
error	*11.98*	*66*	*0.1816*	
total	*12.76*	*71*		

The probability of this result, assuming the null hypothesis, is 0.514

Group A: Number of items= 12 ***Apollo Hospital***
3.51 3.81 3.88 3.97 4.17 4.22 4.29 4.33 4.35 4.39 4.72 4.89 Mean = 4.21
95% confidence interval for Mean: 3.966 thru 4.457
Standard Deviation = 0.383
Hi = 4.89 Low = 3.51
Median = 4.26
Average Absolute Deviation from Median = 0.285

Group B: Number of items= 12 ***Escorts Hospital***
3.63 3.73 3.79 3.99 4.03 4.21 4.22 4.23 4.25 4.34 4.60 4.80 Mean = 4.15
95% confidence interval for Mean: 3.905 thru 4.396
Standard Deviation = 0.345
Hi = 4.80 Low = 3.63
Median = 4.21
Average Absolute Deviation from Median = 0.255

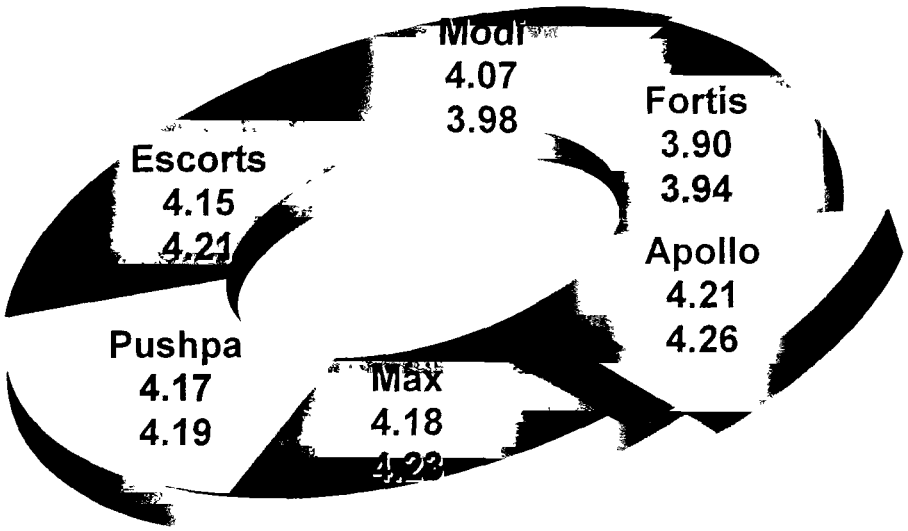
Group C: Number of items= 12 ***Fortis Hospital***
3.23 3.29 3.40 3.64 3.72 3.86 4.01 4.02 4.09 4.21 4.52 4.83 Mean = 3.90
95% confidence interval for Mean: 3.657 thru 4.149
Standard Deviation = 0.484
Hi = 4.83 Low = 3.23
Median = 3.94
Average Absolute Deviation from Median = 0.379

Group D: Number of items= 12 ***Max Hospital***
3.59 3.66 3.72 4.00 4.12 4.22 4.23 4.25 4.40 4.46 4.70 4.79 Mean = 4.18
95% confidence interval for Mean: 3.933 thru 4.424
Standard Deviation = 0.388
Hi = 4.79 Low = 3.59
Median = 4.23
Average Absolute Deviation from Median = 0.295

Group E: Number of items= 12 ***Modi Hospital***
3.43 3.50 3.67 3.81 3.84 3.94 4.03 4.13 4.22 4.50 4.83 4.89 Mean = 4.07
95% confidence interval for Mean: 3.821 thru 4.312
Standard Deviation = 0.475
Hi = 4.89 Low = 3.43
Median = 3.98
Average Absolute Deviation from Median = 0.367

Group F: Number of items= 12 ***Pushpawati Singhania Hospital***
3.51 3.55 3.60 3.97 4.03 4.12 4.26 4.36 4.47 4.49 4.79 4.89 Mean = 4.17
95% confidence interval for Mean: 3.925 thru 4.416
Standard Deviation = 0.461
Hi = 4.89 Low = 3.51
Median = 4.19
Average Absolute Deviation from Median = 0.373

The overall mean for the respective hospitals and the median have been calculated. The mean and median comparison is given below, starting from Apollo hospital with the highest values to the Fortis Hospital with the lowest values (in clockwise direction):



Hence, on the basis of Mean/Median the best hospital is Apollo while the worst is Fortis (in absolute sense).

Hospital Comparison (in order of Mean/Median)

- Indraprastha Apollo Hospital
- Max Devki Devi Hospital
- Pushpawati Singhania Hospital
- Escorts Heart Institute and Research Centre
- Modi Hospital
- Fortis Hospital

The Ratio of respective Perception to Expectation means, on a bivariate comparative basis, results in the sequence as:

- Escorts Heart Institute and Research Centre,
- Indraprastha Apollo Hospital,
- Max Devki Devi Hospital,
- Pushpawati Singhania Hospital,
- Modi Hospital, and
- Fortis Hospital

The only change here is Escorts taking 1st place from 4th -the difference between the expectations and perceptions being the least. Hence when the expectation score is taken cognizance of, then Escorts fares the best on the perceptions. This implies that Escorts offers minimum gap between the perceptions and the expectations.

Table 4.15(contd.): **Means Comparison for Hospitals across Factors**

Hospital	F1E	F1P	F2E	F2P	F3E	F3P	F4E	F4P	F5E	F5P	F6E	F6P
Apollo	4.224	3.512	4.168	3.808	4.725	4.354	4.291	3.968	4.886	4.392	4.329	3.878
Escorts	4.210	3.626	4.233	3.785	4.599	4.216	3.988	3.735	4.802	4.247	4.337	4.025
Fortis	4.094	3.234	4.024	3.398	4.518	3.639	3.861	3.289	4.831	4.012	4.213	3.723
Max	4.463	3.658	4.250	3.720	4.701	4.224	4.230	3.586	4.789	4.118	4.404	3.996
Modi	4.225	3.433	4.132	3.668	4.825	4.031	3.938	3.500	4.888	3.813	4.500	3.842
Pushpa	4.486	3.551	4.362	3.600	4.789	4.261	4.033	3.511	4.889	4.122	4.474	3.970

Hospital Comparison (contd.)

The expectation scores mean across the hospitals is the highest for Factor 5.

Fortis takes most of the "least scores".

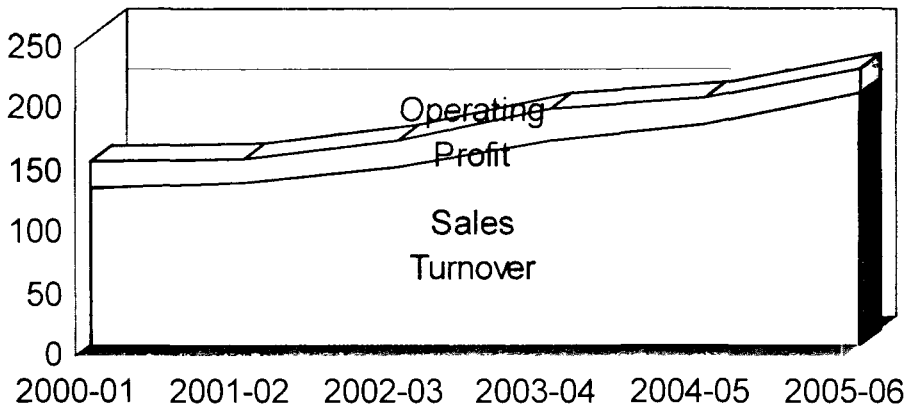
Across the hospitals most of the top mean scores are taken by Apollo.

The least perception score means across the hospitals accrue to Factor 1.

4.4 Profitability

Indraprastha Apollo Hospital Rupees in Crores

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Sales Turnover	126.8	130.85	144.98	165.94	177.87	204.56
Operating Profit	20.73	20.47	20 19	24.64	22.01	18.25
Percentage	16.3	15.6	13.9	14.8	12.4	8.9



Max Hospitals

Sales Turnover	49.4	27.3
Operating Profit	01.6	-11.7

As we see here that Max Hospitals are still in the capital expenditure mode and the profits, even the operating profits, will take some years in showing up.

4.5 References

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CHAPTER V

SUMMARY AND CONCLUSIONS

5.1 Introduction

This chapter concludes the work done and hence the research document, and lays down the limitations of the work done as also highlights the further research opportunities towards a follow-up research.

5.2 Summary

Concept

The whole conceptualization of this research topic was a bye product of personal experiences at some of the Government and the so called Charitable Hospitals. Having taken the gauntlet there was no option of going back in spite of the warnings by friends, specialists like CRMGuru and the lack of research in this area.

Healthcare marketing primarily being a service marketing concept, Relationships are very important. Relationship Marketing is a marketing method in which businesses consistently maintain two-way communication with their prospective, current and inactive customers in order to gain a deeper understanding of their needs while delivering personal and compelling marketing throughout their lifecycle.

Research in relationship behavior and relationship marketing has presented a lot of strong evidence that supports the hypothesis that the relationship aspect plays a central role in the understanding of markets and company behavior in real life. This research not only draws such conclusions from empirical evidence, but also from theoretical models of behavior and marketing systems that can actually describe and explain relationship patterns and market structures (Hougaard and Bjerre 2004 14).

Given the dramatic effect that improved customer retention can have on business profitability, the hospitals need an approach that leads to greater loyalty, enhanced relation and profitability. This in turn requires them to better understand how to measure customer retention; identification of root causes of defection and related key service issues; and the development of corrective action to improve retention. While the Healthcare sector is very broad and consists of many segments we are restricting this study to Hospitals only.

The setting up of the Corporate Hospitals, although still at the nascent stage in India, was preceded by the Charitable Hospitals phase. The healthcare scenario had otherwise been occupied wholly by the Government Sector except for the private clinics. Now, the situation has reversed wherein the Government investments in the Hospitals is very less, barely to the extent of 20% of the total expenditure on health in India. Although, on the whole for an Asian comparison the Health expenditure as % of GDP for India is a healthy 5% + and is only second to China. In India healthcare is about to explode: the sector, comprising sectors like hospitals, health insurance, and managed care is worth $15 billion translating to Rs. 670 billion currently (that's almost equal to the turnover of the country's 12 largest private sector companies including Reliance Industries, Hindustan Lever and ITC).

Objectives

The relevance of the research is both from industry and academic viewpoints. The objectives of this research are:

- To ascertain the Customer Service Quality perceptions vis-à-vis the expectations.

The research sub objectives to attain the main objective are:

- To understand the service standards maintenance thru responsiveness, reliability and assurance.
- To understand the convenience, empathy and tangibles delivery against the expectations.

This study is descriptive in nature and conducted in phases. The first phase deals with developing an appropriate research framework with facts and theories accessed from literature survey on Healthcare sector, Healthcare sector Analysis, and the current pattern of Customer Relation practices in the Healthcare sector. The aim is to develop the framework, which will then be used to serve meeting the research objective and sub objectives. The second phase of the study will be an empirical study of Hospitals through the beneficiaries. The research approach includes Survey Research, through structured questionnaire and Interviews. The standardized and validated questionnaire after due pilot testing and suitable changes, if any, are used.

Questionnaire and Data Collection

A structured questionnaire was developed to collect data on the variables in this study. The questionnaire was adapted from the famed Service Quality: SERVQUAL (Parasuraman, Zeithaml, and Berry 1986, 1988); Ethics: Corporate Ethics Scale: CEP (Hunt, Wood, and Chonko 1989); Ethics: Marketing Norms Ethics Scale (Vitell, Rallapalli and Singhapakdi 1993) and Customer Orientation (Deshpande, Farley, and Webster 1993). A modified SERVQUAL questionnaire

relevant to the healthcare industry was constructed by including items from the original five dimensions (Tangibles, Reliability, Responsiveness, Empathy and Assurance) of the SERVQUAL instrument developed and updated by (Parasuraman, Zeithaml, and Berry 1986, 1988). Cronin and Taylor (1992) test several service quality models, as well as the relationships among service quality, satisfaction, attitude, and purchase intentions. Their research supports measuring service quality as a unidimensional, performance-based construct called SERVPERF, which is equivalent to the 22 PERCEPTION items of the original SERVQUAL measure. The items were refined and paraphrased in both wording and contextual application as appropriate to suit research purposes. We received responses from 406 respondents and the number is sufficient even at maximum variability and 95% level of confidence.

Data Analysis

The reliability of the data was ascertained before any analysis was taken up so as to make sure about its utility for analysis. This was followed by a demographic analysis of the sample. The sample is almost perfectly balanced in terms of Gender and inpatients/outpatients although there is a minor skew of 3% towards outpatients. The gender representation from urban populace is equally divided while females form less than 34 percent of the rural sample. Likewise less than 34 percent of rural sample were inpatients. The Hospitals attracted most patients from their respective super specializations, e.g., Escorts, Max and Apollo for Cardiology; Pushpawati for Renal, hepatic and Stomach; and Fortis, Modi for General patients (mostly outpatients). More than 60 percent inpatients were cardiology cases while majority of outpatients were from general or other ailments.

Findings

The Hospitals attracted most patients from their respective super specializations, e.g., Escorts, Max and Apollo for Cardiology; Pushpawati for Renal, hepatic and Stomach; and Fortis, Modi for General patients (mostly outpatients). More than

60 percent inpatients were cardiology cases while majority of outpatients were from general or other ailments. The correlation coefficients in the above tables are all in the significant zone at 99% confidence level and hence ready for Factor analysis.

The hospital services overall as also for each of the variables were found to be short of the expectations, although to a varying degree. The aspect has been discussed in details identifying the variables and the expectation perception gaps respectively. The hospitals have been rated in accordance with the responses from the respondents.

5.3 Conclusion and Recommendations

Service Quality is "the degree of discrepancy between customers' normative expectations for the service, and their perceptions of the service performance."

- Reliability, (dependability, accuracy)
- Responsiveness, (prompt, with staff showing a willingness to help),
- Assurance, (knowledgeable and courteous employees, who convey trust and confidence)
- Empathy, (caring and individual attention);
- Tangibles, (equipment, cleanliness), and
- Convenience, (location, navigational guidance)

Babakus and Mangold determined that SERVQUAL is reliable and valid in the hospital environment, but also raised questions about the need to measure expectations

The corporate hospitals here are not meeting the standards as expected by the patients on all the fronts although, by varying degree.

The Service Performance being not upto the Service Quality levels desired by the patients, the hospitals have got to get their act together. The Corporate Hospitals must act in all the seriousness to plug the gaps and excel on the respective parameters.
Providers consider increasing quality in health care to be "the right thing to do".

The revival of customer service occurred, in part, because service quality, as opposed to cost, distinguishes among health care institutions (Hudson 1998). Secondly, involvement and satisfaction of the customer affect behavior. Legnick-Hall (1997) developed a conceptual model of the consumer contribution to quality, which includes a description of the relationship of perceived quality to satisfaction, and the motivation to change behavior. This is of considerable importance if you consider the relationship between patient satisfaction and compliance with medical treatment plans. Researchers found a positive relationship between the patients' feeling of satisfaction and compliance with respective medical regimes (Harris, et al 1995) (Drug Topics 1998) (Salimbene 1999). Third, as quality improves, expectations increase. According to Moore and Berry, as consumers become more quality conscious, service firms not only need to satisfy their expectations, but to exceed them (Moore et al 1994) (Berry et al 1988).

The consequence of NOT meeting expectations received some attention. Researchers identify managing negative reactions, which come from unmet expectations, as a strategic method for ensuring patient satisfaction. Not to do so, is to lose market share and customer loyalty. (Mittal 1996 and Zifko-Baliga 1997). Dube and Menon (1998) conducted further research on the relationship of negative emotions to reduced satisfaction. Leaders in the health care industry, therefore, need to anticipate patient expectations, then develop health care services that will exceed them (Sherden 1998).

The more pragmatic argument relates quality to increased market share and a stronger competitive edge. Shetty (1987) maintains that quality can advance profitability by reducing costs and improving a company's competitive position. Within the health care industry, competitive advantage is best attained through service quality and customer satisfaction in the minds of customers (Taylor 1994). Woodside, et al, (1989) provided support for service quality influencing service provider choice.

The following is the hospital comparison in terms of the analysis of the collected information:

BEST

- Escorts Heart Institute and Research Centre is the best in terms of Tangibility, Convenience and Responsiveness implying that it has the least of difference between the expectations and perceptions.

- Indraprastha Apollo Hospital is the best in Assurance, Empathy and Reliability attributes.

- The Highest of the values all across the perception and expectation values across the factors is for Tangibility at Escorts.

- The Second Highest value all across the perception and expectation values across the factors is for Convenience at Escorts.

- The best performance is exhibited for Convenience and Tangibility.

WORST

- Fortis Jessa Ram Hospital is the worst in Responsiveness and Empathy.

- Pushpawati Singhania Hospital is the worst in Assurance.
- Max Devki Devi Hospital is the worst in Tangibility.
- Modi Hospital is the worst in Reliability and Convenience.
- The poorest performance is exhibited in Responsiveness and Reliability.
- The Lowest value across the factors is for Reliability at Modi Hospital.
- Second Lowest value across the factors is for Responsiveness at Fortis Jessa Ram Hospital.

Hence the Competitive advantage can be claimed and further improved upon by Escorts Heart Institute and Research Centre and Indraprastha Apollo Hospital while furthering their performance for the other factors. Fortis Jessa Ram Hospital and Modi Hospital have considerable efforts to put in even to close their gap with Escorts and Apollo. Singhania Hospital and Max Hospital are more middle of the road hospitals and require lesser strategy and plans to catch up with the top hospitals.

India's corporate hospitals need to be fully equipped, up market and efficient. With their toll-free helplines, interactive websites, online quotes and time-bound treatment access, they can appear to be a world apart from the overburdened, often badly managed and poorly funded public health system.

Just three major corporate hospital groups, Fortis Healthcare, Wockhardt and Apollo Hospitals run 26 hospitals in the subcontinent and that number is growing. They are forming partnerships with international insurance and tourism companies that will send both insured and uninsured patients for low cost

treatment. This will boost their image globally since most of them already have the coveted global accreditations.

Joint Commission International, a benchmarking body lists Indraprastha Apollo, New Delhi, and Wockhardt, Mumbai, as accredited hospitals. Accreditation apparently brings immediate benefits. "There has been a steady increase in the number of patients over the last six to eight months, particularly from the U.K. and U.S. The numbers have been increasing after accreditation, particularly from the U.S.," says Vishal Bali, chief executive officer of Wockhardt.

It is also important to have systems that meet the criteria of insurance companies. Says cardiac surgeon V.V. Bashi of MIOT Hospital, Chennai: "Our medical standards are world class, but if we have to get more patients from the U.S. and other developed countries, we must match their hospital documentation standards. This is really important because the insurance companies must cover all the risks in the event of an adverse treatment outcome."

Wockhardt's hospital in Bangalore, which has a Harvard Medical International tie-up, gets half of its foreign patients (about 900), from the U.K. The media reported the story of one such patient with coronary heart disease, 73-year old George Marshall last year. This violin repairer from Bradford was operated upon at the hospital for a quarter of what he would have paid for private care in the UK, including the airfare.

When he arrived in India, he was initially shocked by the traffic chaos and urban squalor, but it appeared to be a better decision than having to suffer a long delay for bypass surgery in a state-supported National Health Service hospital or fork out GBP £19,000 for immediate private care in his home country.

Another 35 per cent of Wockhardt's patients come to Bangalore from the U.S. and the rest from the European Union and South East Asia. Another heart care

institution in Bangalore, Narayana Hrudayalaya, has a record of 15,000 surgeries performed on patients from 25 foreign countries, half of them children.

With some friendly policies from the Government, the private healthcare sector can transform the potential of medical tourism into a very profitable reality. Stories of foreign nationals undergoing complicated surgery in the country are frequently featured in the media. Those who come now are not just from other developing countries (the first lady of Guyana brought a group of 15 patients for cardiac treatment to Frontier Lifeline hospital in Chennai), but also from the United Kingdom, Europe and North America. Tanzania and Iraq have a Memorandum of Understanding with the Madras Medical Mission.

Many opt to undergo surgery in India for reasons that range from long waiting times in the U.K., high costs or lack of insurance cover in the U.S., to plain lack of expertise in many Asian, African and West Asian countries. This needs to be further augmented and the point must be communicated across efficiently and clearly to the global market for the best scenario. Although, it is a big question if all this will make the facilities unaffordable and out of bounds, in terms of waiting time, for the domestic population. Yet, one thing is for sure that the positive rub-offs will exceed the limitations and healthcare will become an effective and steadily growing sector with attraction of market entry for other players or for expansion of the network.

The CII-McKinsey report says that the allopathic system can offer treatment in specialities such as cardiac, liver, renal and orthopaedic procedures, while Indian systems of medicine could attract patients from even the developed world to treat "lifestyle diseases" such as stress and rheumatism. Many visitors who come for such de-stressing and health-building treatment may also choose to visit tourist spots. Such tourism potential holds the key to Kerala's plans. The Ayurveda State has declared 2006 the year of medical tourism and is actively supporting its

well-known traditional medicine and tourism sectors, as they reach out to more potential visitors.

Elsewhere, development plans, both State-led and in the private sector are being pursued actively: Karnataka, which gets about 8,000 patients a year and forecasts an annual growth rate of 25 per cent, will promote a massive health park near a new international airport in Bangalore; non-resident Indians have formed a medical tourism company in Vadodara and international property developers are venturing into the healthcare sector to participate in the construction boom. In Maharashtra, the State Government is part of the Medical Tourism Council that has members from Association of Hospitals and FICCI.

In New Delhi, Naresh Trehan, executive director of the Escorts Heart Institute and Research Centre has proposed a Medicity on the outskirts of the capital to develop a 1,500-bed healthcare centre of international standards with 20 super specialities. It will incorporate traditional medicine too and have such facilities as hotels, serviced apartments, clinical and biotechnology laboratories.

Ventures such as these draw encouragement from the National Health Policy 2002, which endorses provision of health services "on a payment basis to service seekers from overseas". The corporate healthcare sector views such support as critical, considering that it is competing with Thailand, Singapore, Malaysia and South Korea for a bigger share of Asia's medical tourism market. "Medical tourism can be a much bigger business, if we have infrastructure and networking among hospitals, hotels and tourism agencies. The Central and State governments must extend tax and other concessions, on the lines available to IT and BPO sectors," says K. Ravindranath, managing director, Global Hospitals, Hyderabad. He readily favours cross subsidy for domestic patients from revenues flowing out of medical tourism.

Private hospitals in Hyderabad, some of which get 10 per cent of their patients from abroad, are planning to open separate wards or wings for foreigners. The Apollo Hospitals already has a ward and wants to upgrade it to an international multi-speciality block while the Asian Institute of Gastroenterology plans to create a separate wing for foreigners.

Figures for patient arrivals from abroad are available from individual states and hospitals: The Karnataka Tourism Department says it has been receiving about 8,000 patients annually, mostly for cardiac and orthopaedic procedures. Manipal gets 3,000 foreign patients a year, some of them for dental care; Wockhardt Hospital and Heart Foundation in Bangalore gets 900 patients a year.

The biggest disincentive to medical tourism, the hospitals say, is the insensitive handling of visa issuance to those who come for treatment. While people-to-people relations are strengthened when a patient from Pakistan, Iraq or Afghanistan gets operated upon in India, the requirement that visitors must report to designated officials periodically is viewed as avoidable harassment. "The patients get dejected, though they are grateful to the doctor, hospital and host country for saving their lives," says Dr. Bashi.

Strong emotional bonds can indeed be built by treating patients from other nations, says urologist Sunil Shroff of Sri Ramachandra Medical College and Research Institute, who has led a campaign for ethical transplants and altruistic organ donation in India through the MOHAN Foundation. "Medical tourism needs a national task force that will bring hospitals and the government together. We must ensure that a health divide is not created within the country and yet use this huge opportunity," he says.

The corporate hospitals have not failed to recognise the opportunity. Many of them are upgrading to offer the latest medical diagnostic facilities to medical tourists, which may also be packaged with vacations in a tie-up with airline

companies. Says Anil Maini, president, corporate development, Indraprastha Apollo, "We have 64 slice CT scans, PET CT and 3 TELSA MRI machines which most hospitals abroad cannot boast of."

But as corporate hospitals open their doors to a greater number of medical tourists, some analysts believe that the impact of this phenomenon on national healthcare needs careful study. Some observers fear an exodus of highly skilled doctors from the atrophied public health system to high paying private hospitals. "Many States are not even ready to fill vacancies in government medical service, compounding the problem," says a surgeon in Chennai's Government General Hospital, the apex public health institution in Tamil Nadu.

5.4 Limitations of this study

- The study is geographically limited in its scope since it covers only the Metropolitan Delhi. The response to the mailed questionnaires was rather poor limiting the whole exercise.

- Since the responses were from Delhi only one of the most important aspects missed was the response from the rural masses since they hold the key to the future of these hospitals.

- The cross comparisons between the Government Hospitals, Charitable Hospitals, Corporate Hospitals and the Diagnostic set ups is lacking since the scope of the study was limited to Corporate Hospitals only.

- The mental state of the inpatients and their attendants, in view of their miseries, does not allow them to respond to the questionnaire as rationally as is desirable in the said exercise. At times the responses are led by more of feelings than the truth. Moreover, the response basis is very subjective and hence introduces bias in the exercise, although,

some bit of it is eliminated on account of Before-After kind of the questionnaires. This mostly evens out the bias.

- Corporate hospitals are at a nascent stage. There is a distinct evolution of corporate hospitals from the charitable, private and Government hospitals. Most of the hospitals are barely one to two years old and are yet to be out of their respective teething problems. The management led stable strategies normally start taking effect only after 3 to 4 years of successful existence of the Hospitals.

- The Doctors' and staff interviews could have given the Human Resources perspective too. This could have given useful insight into their thought process and the value system and hence the management perspective on the whole.

- The Credence issues are not addressed in absolute sense. These are attributes that can be discerned only after the product or service is purchased or consumed. Credence properties are at the end of the spectrum and are often difficult, if not impossible for consumers to evaluate. Since many service encounters contain many credence properties, consumers often have difficulty finding attributes on which to base the experience. As a result, consumers evaluate the process, based on predetermined scripts, as well as a reaction to the service provider, again, based on a set of scripts. The typical model of consumer satisfaction, that satisfaction is the result of expectations, performance, and disconfirmation, may not be applicable to the health care setting. Health care services in general contain high credence properties, making it difficult for consumers to develop expectations prior to receiving service. While these individuals may not have a defined set of expectations regarding their care, they generally have an idea of the process that takes place, and therefore are able to judge

whether the service is being provided at a satisfactory level. Hence, the credence properties are not clearly identifiable and hence very difficult to measure.

- The provider-consumer interaction is more intense, and can at times have Life and death consequences and hence this aspect too is important to be covered.

- The repeat buying behavior has not been explored. Although, generally undesirable feature in terms of the Hospital care, the repeat buying behavior is an important aspect in terms of the outpatients. This can reflect upon the continued faith on the Hospital and hence the patient satisfaction with the whole experience. On the other hand, this can also raise questions about the effectiveness of the treatment as such and the quality of healthcare besides the Doctors' competence.

5.5 Areas for future research

- Extensive national study to compare the hospitals on each specialty. The needs against each of the specialties are different and hence require segregated treatment.

- The cross comparisons between the Government Hospitals, Charitable Hospitals, Corporate Hospitals and the Diagnostic set ups can give a detailed and clear cut insight into the basic differences and the respective points of weaknesses and the strengths.

- A cross country study, especially the Asia-pacific region, between the different factors and variables can help in understanding the basic paradigms and hence enable in realizing the specific strengths and weaknesses.

- Study of training initiatives, appraisal systems and the customer centric initiatives from the top management. Interview of Doctors, staff, vendors and suppliers for 360 degrees knowledge and relevant results. This can lead us to the organizational mindset towards the complete scheme of things.

- The qualitative fact with respect to the quantitative details of medical tourism. This aspect has become critical both to the Indian economy and the Indian healthcare system (in terms of costs, new corporate hospitals entry, quality of care and the competence of Doctors).

- Corporate Social Responsibility Initiatives by the hospital. This will help in judging the hospital on its efforts towards not just individuals but about the society on the whole. The hospitals have a major role to play in bringing about the social equalization and well-being.

- Benchmarking of critical services in Hospitals is extremely useful in deciding the comparative ratings of the hospitals, thereby, recognizing and promoting excellence and also to present the achievement yardstick for the hospitals which are lagging behind.

- Patient satisfaction has been connected with health care utilization too, although there is disagreement among researchers regarding this relationship. For example, Roghmann et al. (1979) studied the impact of satisfaction on health clinic utilization levels of mothers receiving Medicaid, and results indicated that satisfaction with clinics was positively associated with utilization. Mirowsky and Ross (1983) found that satisfaction with physicians increases physician visits, which, in turn, decreases satisfaction. Still others have found no relationship between satisfaction and health care utilization. Kolodinsky (1995) examined consumer satisfaction with primary care physicians in

managed care health plans. Results indicate that there does not exist a simultaneous relationship between use of physicians' services and satisfaction. The contradictory findings from researchers provide the motivation for continued research into this topic.

- The credence issues in healthcare need to be examined on a holistic basis so as to delineate the same from the other factors and present an integrated model to examine the patient satisfaction levels.

- The success rate in terms of the minimal post procedure mortality rates also need to be examined for the critical cases.

- While satisfaction and quality are different concepts, a relation between the two has been identified. Incidents of satisfaction, over time, result in perceptions of quality in services (Rodwin 1994). This relationship, however, has not been widely tested empirically. The literature on satisfaction, particularly patient satisfaction, shows that satisfaction ratings are derived from satisfaction with various components of their care, and that consumers are able to make summary judgments regarding their care. Similarly, quality is a multidimensional concept. Donabedian's (1980) structure, process, and outcome is more applicable to traditional health care settings, while SERVQUAL proposed by Berry, Zeithaml, and Parasuraman's (Parasuraman, Zeithaml, and Berry, 1985; 1994) captures quality in long-term care more effectively. Both the satisfaction and quality literature has divided researchers on a number of issues (e.g., the use of consumers' evaluations of health care, and the relationship between satisfaction and health care utilization), which provides impetus for further research into these areas.

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APPENDIX A

Questionnaire for Pilot Study

Name **Sex: M / F**

Age **Profession**

Income Group **Urban/Rural**

Ailment (Organ): **Heart/Kidney/Liver/Ortho/Endocrine/Cancer**

Q for Newly Admitted / Prospective Customers

This survey deals with your opinions of Healthcare services. Please show the extent to which you think firms offering Healthcare services should possess the features described by each statement. Do this by picking one of the seven numbers next to each statement. If you Strongly Agree that these firms should possess a feature, enter 5. If you Strongly Disagree that these firms should possess a feature, enter 1. If your feelings are not strong, enter 4 for Agreement; enter 3 for neutrality and 2 for Disagreement. There is no right or wrong answer. All we are interested in is an opinion that best shows your expectations about firms offering Healthcare services.

1. The hospitals should have up-to-date equipment.

2. Their physical facilities should be aesthetically designed.

3. Their employees should be well dressed and appear neat.

4. When patients have problems, these Hospitals should be sympathetic and reassuring.
5. These Hospitals should be reliable and must honour commitments.
6. The records should be easily retrievable.
7. #They shouldn't be expected to tell patients exactly when procedures will be performed.
8. #It is okay if they are too busy to respond to patient's requests promptly.
9. Patients should be able to trust employees of these Hospitals.
10. Patients should be able to feel safe in their transactions with these Hospitals' employees.
11. Their employees should be polite and should get adequate support from these Hospitals.
12. #These Hospitals should not be expected to give patients individual attention.
13. #Employees of these Hospitals cannot be expected to give patients personal attention.
14. #It is unrealistic to expect employees to know what the needs of their patients are.
15. #They shouldn't be expected to have operating hours convenient to all their patients.

16. All extra–cost added features should be identified and Coercion should not be used.
17. One should not manipulate the availability of a product for the purpose of exploitation.

18. Undue influence should not be exerted over the patient's choice to handle a product.

19. Information regarding all substantial risks associated with services usage should be disclosed.

20. Patients and vendors should be treated fairly.

21. Confidentiality and anonymity in professional relationships should be maintained with regard to privileged information.

22. Obligations and responsibilities in contracts both written and implied should be met in a timely manner.

23. The practice and promotion of a professional code of ethics must be actively supported.

24. Products and services offered should be safe and fit for their intended uses.

25. Communications about products and services offered should not be deceptive.

26. False and misleading advertising should be avoided.

27. High-pressure manipulations or misleading sales tactics should be avoided.

28. Sales promotions that use deception or manipulation should be avoided.

29. One should discharge one's obligations, financial and otherwise, in good faith.

30. The full price associated with any service should be disclosed.

31. Selling or fund raising under the guise of conducting research should be avoided.

32. Research integrity should be maintained by avoiding the misrepresentation and omission of pertinent research data.

33. One should always adhere to all applicable laws and regulations.

34. One should always accurately represent one's education, training and experience.

35. One must always be honest in serving consumers, clients, employees, suppliers, distributors, and the public.

36. One should not knowingly participate in a conflict of interest without prior notice to all parties involved.

Q for Recently discharged or under Discharge Patients

Directions: The following set of statements relate to your feelings about the hospital. For each statement, please show the extent to which you believe the

hospital has the feature described by the statement. Once again, entering a 5 means that you strongly agree that the hospital has that feature, and entering a 1 means that you strongly disagree. You may enter any of the numbers in the middle that show strong your feelings are. There are no right or wrong answers. All we are interested in is a number that best shows your perceptions about the hospital.

P1. The Hospital has up-to-date equipment.

P2. The Hospital's physical facilities are visually appealing.

P3. The Hospital's employees are well dressed and appear neat.

P4. The appearance of the physical facilities of the hospital is in keeping with the type of services provided.

P5. When the hospital promises to do something by a certain time, it does so.

P6. When you have problems, the hospital is sympathetic and reassuring.

P7. The Hospital is dependable.

P8. The Hospital provides its services at the time it promises to do so.

P9. The Hospital keeps its records accurately.

P10. The Hospital does not tell customers exactly when services will be performed.

P11. You do not receive prompt service from the hospital's employees.

P12. Employees of the hospital are not always willing to help customers.

P13. Employees of the hospital are too busy to respond to customer requests promptly.

P14. You can trust the employees of the hospital.

P15. You feel safe in your transactions with the hospital's employees.

P16. Employees of the hospital are polite.

P17. Employees get adequate support from the hospital to do their jobs well.

P18. The Hospital does not give you individual attention.

P19. Employees of the hospital do not give you personal attention.

P20. Employees of the hospital do not know what your needs are.

P21. The Hospital does not have your best interests at heart.

P22. The Hospital does not have operating hours convenient to all their customers.

ETHICS Q for Hospital Doctors and Employees – Answers in Y/N

1. Managers in my company often engage in behaviors that I consider being unethical.

2. In order to succeed in my company, it is often necessary to compromise one's ethics.
3. Top management in my company has let it be known in no uncertain terms that unethical behaviors will not be tolerated.

4. If a manager in my company is discovered to have engaged in unethical behavior that results primarily in personal gain (rather than corporate gain), he or she will be promptly reprimanded.

5. If a manager in my company is discovered to have engaged in unethical behavior that results primarily in corporate gain (rather than personal gain), he or she will be promptly reprimanded.

CUSTOMER OREINTATION Q for Hospital Doctors and Employees – Answers in Y/N

1. We have routine or regular measures of customer service.

2. Our product and service development is based on good market and customer information.

3. We know our competitors well.

4. We have a good sense of how our customers value our products and services

5. We are more customer focused than our competitors.

6. We compete primarily based on product or service differentiation.

7. The customer's interest should always come first, ahead of the owners.

8. Our products/services are the best in the business.

9. I believe this business exists primarily to serve customers.

APPENDIX B

FINAL QUESTIONNAIRE

Name	**Sex: M / F**	**Monthly Income**
Education	**Age**	**Hospital Name**
Inpatient/Outpatient	**Urban/Rural**	**Profession**

Ailment: General/Heart/Kidney/Liver/Orthopedic/Cancer/Other (please specify)

This survey deals with your expectations of Healthcare services. Please mark the extent to which you think firms offering Healthcare services should possess the features described by each statement. Do this by inserting one of the five numbers next to each statement. If you Strongly Agree (SA) that these firms should possess a feature, enter 5. If you Strongly Disagree (SD) about these firms needing to possess a feature, enter 1.If your feelings are not strong, enter 4 for Agreement (A); enter 3 for neutrality (N) and 2 for Disagreement (D). There is no right or wrong answer. All we are interested in is your **expectations** from them.

1	2	3	4	5
SD	D	N	A	SA

1. The Hospital should be conveniently located.

2. Phone enquiries should be handled politely and satisfactorily.
3. Reception services should be helpful.
4. Queues and Patients management should be professional.
5. The Hospital should have least invasive state of the art equipment.
6. General hygiene and cleanliness should be maintained.
7. Doctors and staff should attend to patients in time and be sympathetic.
8. The waiting lounge should be aesthetically and functionally proper.
9. The Cashier/ Billing services should be prompt and proper.
10. The facilities should be physically appealing.
11. Doctors should be dependable and ethical.
12. Nurses and support staff should maintain high standards of service.
13. Free Drinking water facilities should be available.
14. Canteen and Parking facilities should be good and professional.
15. Telephone facilities should be easily available at reasonable prices.
16. Credit/Debit Card facility should be available and functional.
17. Emergency Services should be actually available round the clock.
18. The queries should be well responded to the patients/attendants.
19. Lighting and the direction signage should be proper and functional.
20. The diagnostic services should be reliable and timely.
21. Medicine store location and service should be efficient and ethical.
22. Grievance redress system should be in place and functional.
23. Lifts and proper staircase facilities should be present.
24. Clearly defined and neat uniforms should be there to recognise the staff.

25. Individual attention should be given to the patients.
26. Pricing should be reasonable, clear and ethical.
27. The Doctors should be well qualified and trained.
28. Infectious diseases section should be separate and clearly identified.
29. Medical waste should be disposed as per the acceptable International Standards.
30. The medical procedures should commence after seeking patients' permission in writing.
31. OPD timings should be convenient.
32. All the customers and vendors should be treated fairly and ethically.

This survey deals with your perceptions of Healthcare services. Please mark the extent to which you think firms offering Healthcare services possess the features described by each statement. Do this by inserting one of the five numbers next to each statement. If you Strongly Agree (SA) that these firms possess a feature, enter 5. If you Strongly Disagree (SD) about these firms possessing a feature, enter 1. If your feelings are not strong, enter 4 for Agreement (A); enter 3 for neutrality (N) and 2 for Disagreement (D). There is no right or wrong answer. All we are interested in is an opinion about your **perceptions** about them.

1	2	3	4	5
SD	D	N	A	SA

1. The Hospital is conveniently located.
2. Phone enquiries are handled politely and satisfactorily.
3. Reception services are helpful.
4. Queues and Patients management is professional.
5. The Hospital has least invasive state of the art equipment.
6. General hygiene and cleanliness is maintained.
7. Doctors and staff attend to the patients in time and are sympathetic.
8. The waiting lounges are aesthetically and functionally proper.
9. The Cashier/ Billing services are prompt and proper.
10. The facilities are physically appealing.
11. Doctors are dependable and ethical.
12. Nurses and support staff maintain high standards of service.
13. Free Drinking water facilities are available.
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